Reader's Digest

ARTICLES OF LASTING INTEREST

Our Changing Morals	*Forum*	1
The Bridge Epidemic	*North American Review*	5
A Bank That Fortifies against War	*World's Work*	8
The Tree as an Invention	*Atlantic*	11
This Little Pig Went to Market	*Saturday Evening Post*	15
The Story of the "Eaglet"	*Mentor*	18
Trading Politics for Business	*Review of Reviews*	21
History in Everything — Even Pawnshops	*Century*	24
Learning How to Live	*Harper's*	27
The Screen Speaks	*Scribner's*	30
Shall We Sleep Life Away?	*Plain Talk*	33
The Amazing Persecution of Dr. Dix	*New Yorker*	36
Sh! — They're Filming Talkies	*Popular Science*	39
Does Business Mean Peace?	*Outlook-Independent*	42
Adventure in the Modern Manner	*World's Work*	45
Up and Going	*Collier's*	49
Scotty Allen on Training Dogs	*Good Housekeeping*	52
I Am Fifty — and It Doesn't Hurt!	*American*	55
Learning How to Be Black	*American Mercury*	58
Speed — the New Vice	*Vanity Fair*	61
Blazing New Trails in Education	*Children*	64
Mysteries of Modern Hypnotism	*North American Review*	67
"Third Degree"	*Outlook-Independent*	70
How the English Middle-Class Lives	*Harper's*	73
One Store after Another	*Collier's*	76
Medical Magic Preferred	*Atlantic*	79
The Gilded Sport	*World's Work*	82
Who Gave Us Our Modern Wonders?	*Nation's Business*	85
The Two Leaves	*Bambi* (Simon and Schuster)	88
Ponderables	*Harper's, Century, Atlantic*	90
So They Say	*Golden Book*	92

NO. 85

MAY, 1929

25c a Copy $3.00 a Year

READING FOR RESULTS

"Please cancel my subscription to The Reader's Digest. I receive a number of the magazines from which you quote."

Subscribers who, from time to time, write to this effect, miss an important value afforded by The Reader's Digest.

Tourists in foreign lands all too frequently gather nothing but blurred impressions as they dash from one point to another. The true traveler remains in one place long enough to gain the enduring treasure of a real understanding. The tourist who has "done" a place seldom cares to go back. The wiser traveler returns with increased pleasure.

As with travel, so with reading. Dividends of satisfaction from reading bear little relation to the "mileage covered" in books or magazines. The important consideration is how much has been *absorbed* along one's mental journeys. Most assuredly, our subscribers will have an opportunity to revisit, in the Digest, articles that they have seen before. In all likelihood, they will be of such significance as to be worth re-reading.

Life is hurried, and, in consequence, one's reading is hurried, too. What is read is not often "inwardly digested." For this there should be reflection, cogitation, and re-reading after an interval.

The Reader's Digest furnishes an opportunity for such re-reading, by presenting provocative articles in handy booklet form — completely enough for justice to the content, concisely enough to make easy that fixation of values which is necessary — if the contribution is to become permanently one's own.

THE READER'S DIGEST ASSOCIATION, INC.
Pleasantville, New York

EDITORS

De Witt Wallace Lila Bell Acheson Ralph E. Henderson Clifford West Sellers

Published Monthly, 25c a copy; $3.00 a Year (Foreign, $3.25)
Two-Year Subscription, $5.00 (Foreign, $5.50)
(No extra charge to Canada)

A Braille edition of The Reader's Digest is published monthly by the American Printing House for the Blind, Louisville, Kentucky

---

Entered as second-class matter, at the Post Office at Pleasantville, N. Y., under act of March 3, 1879

Additional entry at Post Office, Concord, N. H. Copyright, 1939, The Reader's Digest Ass'n., Inc.

PRINTED IN THE U. S. A., BY RUMFORD PRESS, CONCORD, N. H.

The Reader's Digest

"An article a day" from leading magazines, in condensed, permanent booklet form.

Eighth Year MAY 1929 Vol. 8, No. 85

Our Changing Morals

Condensed from The Forum (April, '29)

Will Durant

THE moral code has varied astonishingly from time to time, and from place to place.

If, said a Greek thinker, you make a heap of all customs somewhere considered sacred and moral, and then take from it all customs somewhere considered impious and immoral, nothing will remain.

What is it that changes moral codes? Probably alterations in the economic basis of life. There have been two profound economic transformations in history: the passage from hunting to agriculture; and the passage from agriculture to industry. These are the pivotal events in human development on which all other fundamental processes have turned. And in each instance the moral code which had served one group welfare in the older mode of life was found maladapted, and was slowly transformed under the new règime.

Nearly all the races of man once lived by pursuing beasts, killing them, and eating them, often in the raw. Primitive man ate like the modern dog, because he did not know when his next meal would come. Greed was a virtue necessary to self-preservation. Every vice was once a virtue, and may become respectable again, just as hatred becomes respectable in wartime. So, as long as America's resources needed exploitation from within and little protection from without, we fostered the acquisitive impulses and deprecated military virtues. Now something less of exploita-

tion seems demanded, and, so they say, something more of protection; the mere millionaire is too common to be honored, while our generals take the air with unaccustomed grandeur. There is a supply and demand in morals as well as in goods.

The great transition from hunting to tillage created a demand for new virtues, and many old virtues became vices in the quiet routine of the farm. Industriousness became more vital than bravery, thrift more desirable than violence, peace more profitable than war. Above all, the status of woman changed. She was more valuable on the land than in the hunt, she earned her keep a hundredfold, and every child she bore was soon a help far beyond the cost of his food and simple raiment. Motherhood became increasingly sacred, sterility the supreme disgrace, and large families were pleasing to God.

It was in that rural milieu that our inherited moral code took form. On the farm a man matured at an early age — both in mind and in self-support. At 20 he understood the tasks of life as well as he would at 40. So he married early, almost as soon as nature desired. He did not fret long in the restraints which the moral code placed upon premarital relations; the requirement of continence seemed reasonable even when he violated it.

And when the precepts of Christianity enforced strict monogamy and indissoluble marriage, these seemed reasonable too. For the peasant's wife gave him many children, and it was right that father and mother should remain loyal to each other till these children were established in the world. On the farm the code of the Puritans was practicable, and produced a sturdy race capable of conquering a continent in a century.

For 1500 years this agricultural moral system of chastity, early marriage, divorceless monogamy, and multiple maternity, maintained itself in Europe and in European colonies. Even when industry began to appear, it was domestic industry, carried on not in factories but in homes, filling the household with new functions and new significance. Everything conspired to strengthen the ties that held brother to brother.

Then factories appeared. Men and women and children began to leave home and family, authority and unity, to work as individuals, individually paid, in dismal structures sheltering machines. Cities grew; and men fought a life-and-death struggle in dark and filthy shops. Mental maturity came much later than on the farm. At 20, in a modern city, a man is still a boy in the face of a changing and intricate world; at 40, perhaps, he ap-

proaches maturity of mind. Thus adolescence lengthened, and a vast extension of education became a necessity to adjust the brain to the new tasks of modern life.

At once the passage from tillage to industry began to affect the moral behavior of mankind. Economic maturity came almost as late as mental maturity; only in the manual working class was a lad self-supporting and ready to marry at the age of 21. Above those ranks the age of self-sufficiency rose higher with every rise in luxury and place — in the professions, above all. And man, burdened as never before, saw woman shorn of her old functions by the development of factories and machines. In a home now denuded of significance and work, she was a beautiful parasite — nothing more.

If, to avoid this absence of function, she became a mother, the difficulties were increased: motherhood became an expensive affair of doctors, nurses, and hospitals. If she bore many children, so much the worse. They would have to be educated; they would add to the rent and the cost of travel; they would have to be clothed in the latest style. By the time they earned an income, they would have fled from parental authority to the freedom of the irresponsible individual life.

So the city offered every discouragement to marriage, while it provided every stimulus and facility for sex. Erotic development came as early as before, economic development later. That restraint upon desire which had been feasible and reasonable under the agricultural régime, seemed now a difficult and unnatural thing in an industrial civilization that has postponed marriage, for men, even to the 30th year. Inevitably the flesh began to rebel. Chastity, which had been a virtue, became a joke. Modesty disappeared.

It is in terms of this great change from farms and homes to factories and city streets that we must understand the generation that so boisterously replaces us. Their lives and problems are new and different. The Industrial Revolution transforms their customs, their garb, their work, their religion, and their morals.

We stand between two worlds — one dead, the other hardly born; and our fate is chaos for a generation. We are conscious that the morality of restraint and fear has lost its hold upon men, and we must look for a natural moral code that shall rest upon intelligence rather than fear. We are compelled, despite ourselves, to be philosophers — to build for ourselves a system of life and thought that shall be consistent with itself and with the

experience and demands of our time. Where shall we find a moral code that shall accord with the changed conditions of our lives, and yet lift us up, as the old codes lifted men, to gentleness, decency, modesty, nobility, honor, chivalry, and love?

The natural and inevitable basis of morality is the coöperation of the part with the whole. Morality can never be defined in terms of the individual; we must accept the good of the whole as the ultimate criterion by which to judge the behavior of the part.

The test of morality is community good. But we are mistaken in believing that the social instincts are stronger than the instincts of self. It may be so within the family, where self-sacrifice is natural, but outside that little realm the individualistic impulses are in the saddle, as he who runs may see. Heroism is heroic precisely because it is so rare. We are not even the most social of species; we stand midway between the individualism of the jungle and the socialism of the ants. The best we can say is that the social instincts, which seem to be more recent in origin than those of competition and acquisition, are being slowly strengthened by the growing survival value of coöperation.

Finally, we should realize that the coöperation in which morality consists arises less from the growth of the soul than from the widening necessities of economic life. The flower grows out of the soil. Morality spreads as economic and social units increase. The whole with which the part must harmonize to be saved becomes greater as the world is woven into ever larger unities by rails and wires and ships and the invisible bonds of the air. Once trade and common interests merged tribes into nations. Now commerce and mutual interests slowly weave nations into vast international groups, and provide the basis for an international morality in which all the world will agree that patriotism is not enough. Conscience follows the policeman; we have no international morality because we have no international order. But the international order visibly comes; and when at last it is organized, it will be permissible to be loyal to humanity and to rise in morals to that broad perspective, that sense of the whole, which is the secret of the good life, as it is the guide to beauty and the test of truth.

(In the May issue of The Forum, Will Durant writes on "The New Morality."

The Bridge Epidemic

Condensed from The North American Review (April, '29)

Mary Day Winn

THE time of this drama is any Tuesday from November 13 to March 26. The place is North America. The actors are over 3,000,000 people of both sexes and of all social degrees. The stars of the act are Mr. Work (not the former Secretary of the Interior, but *the* Mr. Work), Mr. Whitehead, and whichever two of their disciples have been tapped to play a stellar rôle.

In a little soundproof room in New York City, Mr. Work, designated as "North," majestically leads a two of diamonds. This momentous fact is immediately communicated through 116 broadcasting stations, from Ketchikan in Alaska to Balboa in the Canal Zone, to over 3,000,000 radio listeners. One-fourth of this number, the "Norths," promptly lead the two of diamonds also.

"Mr. Work's opening lead of the two of diamonds indicates that this is the fourth best card of that suit in his hand," explains the high priest at the microphone; at which announcement the eager worshippers hitch their chairs a little closer to the loud speaker.

"Mr. Whitehead, 'East,' follows with the three of diamonds," is the next world-shattering fact which rings over the ether. Whereupon every listening "East" plays the three of diamonds.

This mass movement, the radio bridge game, represents the largest number of human beings who have ever done the same thing at the same time in the history of the race. For the broadcasting is done over a greater number of stations than were hooked up at any one time for either of our leading Presidential candidates.

Influenza and bridge are the two greatest epidemics that have swept this country since the Great Glacier receded and left it habitable. Of the two visitations, bridge is undoubtedly taken the more seriously by those infected. It is the only game, its followers tell us, that is played in all civilized countries. Enthusiasm for it has circled the globe, though the craze is perhaps most virulent in the United States. One-third of the world's players, it is estimated, are Americans; we never do anything half-heartedly.

Anyone who doubts that it is now the great national pastime needs only to cast an eye at the activities of Milton C. Work,

Wilbur C. Whitehead, Sidney S. Lenz and other idols of the card room. Mr. Lenz is reported to have turned down an offer of $1000 for a single bridge lesson, because he did not have the time. Contemplation of the activities of Mr. Work leaves one in a state of collapse.

Mr. Work had practised law successfully for 30 years before he settled down to a really serious profession. A speaking tour of the country in 1917 for the benefit of the Red Cross, in which he earned $100,000 telling a war-torn country under what circumstances it was permissible to make an original no-trump bid, convinced him that he had mistaken his vocation for his avocation. So after the war he turned his back on Blackstone and, somewhat tentatively, offered to give lessons in bridge to some of his friends.

The offer did not remain tentative for long. Before the season was out he was teaching eight hours a day for six days a week and had all his time booked up for a year ahead.

Mr. Work no longer gives bridge lessons; that task is relegated to his hundreds of professional teacher-pupils scattered all over the country. He does, once a year, give a short course of seminar talks to a selected group of these teachers, who come, wide-eyed, from as far as California, to sit at the Master's feet.

But this is only a first faint beginning of his activities. He has written 15 books on bridge, of which several million copies have been sold. Sharpen your pencil, Gentle Reader, and figure the royalties. One can only conclude that these books were written in his sleep, because he also dictates, daily, an article on bridge which is syndicated to over 200 newspapers, dashes off a weekly piece for one of the weekly magazines, and four monthly ones for monthly periodicals, helps to edit *The Auction Bridge Magazine*, and finds time, in between, to collect his share of the profits on the sale of five or six thousand bridge pads a month. This, of course, is all in addition to giving an average of over 200 bridge lectures a year and answering 2,000 to 12,000 letters a month.

Recently asked what he did for rest and recreation, if any, Mr. Work was mildly surprised. "Why, play bridge, of course!" he said.

The above statistics indicate clearly that bridge has advanced to the status of a Menace to the American Home. At the Tri-State Convention of the W. C. T. U. last July, the embattled matrons hurled a lance or two at the Demon Bridge. One cannot escape the conviction that these ladies had at some time or other been scolded for trumping their husbands' aces. Bridge circles

were full of gossip last fall about an unfortunate wife who committed this sin and was promptly slapped by her enraged spouse. Mr. Whitehead, asked his opinion on the matter, remarked that it just went to show how really patient men had become; in the good old frontier days the husband would have shot her. The Chicago judge before whom the slapee subsequently sued for divorce was saddened but not surprised.

It is one of the characteristics of bridge that it can hold the interest of its devotees for a longer time than any other card game ever invented. And those who have become its slaves hug their shackles. The story is told of a commuter who, on his daily trip to the city, used to play bridge with his cronies. At the age of 72 he retired from business, but he was not willing to retire from bridge. Every morning now he takes the 8:10 train, rides into the city as usual, has his hour of bridge, and on reaching the city takes another train back home.

Several national bridge tournaments are held annually, notably those under the auspices of the American Whist League and the American Auction Bridge League, which have the distinction of being the final authorities in this country on bridge laws.

Some of the champions who take part in these tournaments have to be men of stamina. In the mere matter of physical endurance they could probably play the village blacksmith under the table. At this writing, the record for long playing seems to be held by Commander Winfield Liggett, U. S. N., retired, who once endured through a bridge session lasting approximately 83 hours.

His laurels, though, are in danger, for last fall four doughty warriors sat down in a hotel room, grimly determined to play until they had proved that certain tactical methods of bidding, which one of them had advocated in a book, and to which his adversary had taken exception, were good or bad. They were men of distinction in the world of bridge, whose opinions were not to be lightly contradicted.

Three days later the four men rose from the card table, weary knights who had fought the good fight in defense of their principles. With a few hours out for sleep and food, they had played steadily for three days and three nights. The critic and his partner had won, and in their hearts was a great exaltation. In the words of the old proverb (if there isn't an old proverb to that effect there should be), "Happy is the sleep of him who has fought for the right."

The Bank of France Fortifies against War

Condensed from The World's Work (April, '29)

Arthur Train, Jr.

AMERICANS are not the only ones who have learned business foresight. Once in a while the Old World yawns, rises, and settles down to show us what it can do when it tries.

The men who run the Bank of France represent the best that France has to offer in ability. And in spite of the conservative tendencies of their calling, they have vision. They have recently achieved a feat of imagination which staggers the mind.

First, foreseeing the growth of the bank, they built a vault that will be worthy of the monster bank long after the year 2000. Then they sat down and visualized the next war, which experts declare will be so much more terrible than any previous war. So they made their vaults into a subterranean fortress about as impregnable as Gibraltar.

Finally they said to themselves, "The Bank of France has seen in one century a consulate, two empires, a monarchy, a commune, and two republics surge around its walls. It is a matter of historical fact that the bank is more stable than the government itself. The solid gold of the bank represents the confidence of the nation, and it must be protected even against civil war."

The person who sees these vaults is stunned by their immensity. He cannot imagine the necessity for a stronghold so titanic. But the men who planned the vaults must have said to themselves: "Of course no one would try to steal the gold in the Bank of France. But suppose someone did?"

If you put a fish into a little pond in the northeast corner of Paris, he could from there make an underground tour which would include a visit to the foundations of the Opéra, the Bourse, and the Folies-Bergère. Under a large part of the first *arrondissement* lies a subterranean lake. At the Bank of France this lake is 40 feet below the surface. The lake itself is about 40 feet deep, and rests on a huge shelf of solid rock. It is in this rock that the gigantic vaults of the Bank of France have been carved. The vaults form a square hall, 20 feet from floor to ceiling, its sides longer than a football field. The walls are of concrete

and sand and are themselves 20 feet thick.

The person who is fortunate enough to be allowed to visit the vaults takes an elevator on the ground floor of the old bank building and, after descending three stories, emerges at the head of a stairway. At the foot of this stairway is a door that is a sheer eight-ton mass of steel, unbroken on the outside by any lock or handle. Leading to this door is a narrow gauge railroad track, at the other end of which is an armored chariot as high as a man. This chariot is nothing more nor less than the key of the inner lock! But wait!

The steel door swings open, leaving a narrow passage leading to another surface of steel. This is the outer wall of a steel and concrete tower, similar in construction to the turret of an enormous gun, that extends down into the vaults themselves. This tower slowly revolves 90 degrees on its axis until a seven-ton, steel-cuirassed plug is opposite the passage. Then with a subdued snoring of its electric motors the chariot moves forward, makes a right angle on a turntable, enters the passage, comes to a stop with its complicated nose exactly fitted into the plug, and then shunts the plug forward along the rails, leaving a clear passage to the heart of the tower. Here a small mine elevator carries you down the well into the vaults themselves.

The visitor's first impression is that he has been transported by magic into some vast temple. Floor and ceiling stretch away in a perspective broken only by 800 huge pillars. You might be in Mars.

If you stand facing south in the exact center of the vast hall, the subdivision containing safe-deposit vaults and boxes is on your left, the subdivision containing bullion and specie on your right. Back of you is a wall of rock that the engineers have left, like the rock overhead, as a natural protection; and back of that, still farther behind you, is the operating plant, consisting of kitchens, lavatories, and generators.

On the right lies the better part of 32 billion francs' worth of solid gold — the gold reserve of the bank of France. Here bricklike American ingots sleep peacefully in their wire cages a few feet from their barlike British cousins.

The most impressive, and also the most empty, is the middle room, known as the Salle des Abris, to which is devoted nearly half of the 12,000 square yards that make up the total area of the hall. In case of emergency it is here that the entire work of the bank could be carried on. Two thousand people could live and work here. They would be nourished with hot food from the huge kitchens, and with cold food from

the electric refrigerators. The 40,000-odd cubic yards of air in which they breathed would be changed and filtered twice in an hour without altering the temperature. The requirements of personal hygiene would be taken care of by the spotlessly clean lavatories. The whole underground city would function as a complete, self-supporting unit.

There exists no land fort today that boasts such elaborate defenses. The explosive force of projectiles from the biggest mobile rifles in use today would be exhausted before they reached the ledge of rock. If a foreign army were in possession of the city they could, of course, blow up the vaults, but the bullion and specie would be blown up as well. If a hostile group had actually gained admittance to the vaults themselves the waters of the lake would simply be diverted into the vaults, and the enemies would drown like rats, while the treasure would be unharmed.

The Bank of France, invented by Napoleon in 1800, was organized to restore the economic and monetary stability of France after the disastrous effects of the Revolution and the wars that preceded and followed it. Napoleon said: "France lacks men who know what a bank is — we must create a new race." Later he added: "I want a bank that will be under the control of the state, but not too much so." From the battlefield of Jena he wrote ordering a lowering of the discount rate, and he told the regents to write in letters of gold in their board room: "What is the object of the Bank of France? To keep the discount rate at four percent."

The bank has never forgotten his admonition. The conservative character of its discount rate has been the admiration of the world. From 1844 to 1900 it altered its rate one fourth as often as the Bank of England did its rate.

The Bank of France has a talent for helping the nation to recover from war. It succeeded in rebuilding the national wealth within a comparatively short time after the Directoire, after Waterloo, and after 1870. Of the nations who fought in the last war France was the only one except the United States that returned to the gold standard without borrowing outside the country. Out of her own resources she financed almost the whole of the reconstruction of the devastated areas, the cost of which has been estimated at seven billion dollars.

The Bank of France is one of the strongest central banks in the world. Its liquid reserve in London is more than three times the free reserve of the Bank of England, and in New York it is equal to three quarters of the free reserve of the Federal Reserve banks.

The Tree as an Invention

Condensed from The Atlantic Monthly (April, '29)

Charles D. Stewart

IN any tree, however alive, the substance composing trunk and branch — the solid part of the tree — is inert and lifeless matter. The heartwood of a tree is dead in every sense. Its tubes no longer convey sap upward. From the heartwood outward to a point very near the surface we find the water-conveying structure consisting of long tubes; and these tubes are mere conduits, inert and lifeless. At first, when they were being built, there were live cells working inside of them, little bags of protoplasm; but, once they were completed, the live tenants disappeared.

The only part of a tree that is really alive is a thin sheath of cells at the surface of the wood called the cambium layer. It is this live part that keeps building and making the tree larger.

If we cut through a tree, we can count the rings of its annual growth. A cut across a tree near the ground may show 300 annual rings, while cuts at higher points will disclose but 100, or 50, or 40. The rings become fewer and fewer. If we take a particular ring and follow it up we find that it grows smaller and smaller till it diminishes, a ring near the center of the stump coming to an end at no great distance from the ground. And each of these rings, according as it is the 40th or 100th from the center, will show the height as well as the thickness that the tree has attained in that number of years. Just as a tree grows smaller upward, so likewise do these inner sheaths of annual growth. All the successive surfaces of the tree are enclosed here.

Thus we see that a tree is really a sheath of life spread over the dead trees of other years. Generation stands within generation, successively wrapped about. The outer life of cambium and leaf and bud uses this trellis to go up and reach out sunward and skyward. Instead of throwing its old skeleton aside each year and starting anew, it clings to its dead bones, profits by their stature, and makes tubes in them to provide a supply of water for a larger growth. When we compare this way of growth with other methods, both animal and vegetable, it must strike us as a most interesting invention.

As the inner or lifeless part of a tree is incapable of growth, a nail driven into a young tree at any particular height will remain at

that distance from the ground throughout the life of the tree. And a branch coming out at any point will not be carried upward as time goes on.

A tree, like other forms of life, is engaged in the constant circulation of fluid through its tissues. Life processes, animal or vegetable, can go on only so long as each individual cell is surrounded by a fluid containing nutriment. To meet this demand and to provide for a large amount of evaporation, a tree passes up a great deal of water. A fairly large beech tree will use about 65 gallons of water on a dry, hot day, and a large oak will require much more. Even a sunflower will use two pounds. And this water, in the larger species of trees, will have to be lifted 200 and even 300 feet.

Anyone familiar with pressures in a water tower must be interested in asking, How is this done? In the present stage of man's knowledge of physics, we do not know.

The lamp-wick principle, capillary attraction, will not go far in raising water. Water rises in a capillary or fine tube to a height in proportion to the fineness of the tube; and the viscosity of water is such that if the tube is very fine it will not rise at all. Capillary attraction would not raise water to the top of even a moderate-sized tree.

Root pressure or osmosis, a sort of powerful absorption due to unbalanced chemical pressure, has been considered. By cutting off a plant near the ground and fastening a glass tube upright on the stem, it is possible to ascertain the height to which its sap will rise by the pressure from below. Under favorable conditions a grapevine will exert a pressure sufficient to raise a column 36.5 feet, while a birch has tested as high as 84.7 feet. This might seem a promising line of inquiry except that root pressure takes place only in early spring, and especially in the morning. It has been found that when the tree is evaporating the greatest quantities of water, on dry, hot days of summer, there is no root pressure whatever.

It has been proved that the rise of water in the tubes of a tree is caused by a pull from above. A branch, if cut from a growing plant, with its end inserted in an air-tight manner in a glass tube, will draw a supply of water from the tube with such force as to pull a column of mercury up after it. But here again a difficulty intervenes in the solution of the problem.

A suction pump at its best will lift water but 33 feet. The pump, by the lift of its piston, removes air pressure from the upper surface and tends to create a vacuum, in consequence of which

the water is pushed up the pipe from below by the weight of the atmosphere, a pressure of 15 pounds to the square inch at sea level. No invention can be made which will pull more than the laws of physics will enable it to do. And 33 feet falls far short of reaching the top of a sequoia.

But water has *got* to go up those tubes to the top of a tree. It will and does. Hence, scientists began to consider whether water in thin columns, as in these fine tubes, has not an actual coherence, a tensile strength, sufficient to stand a strong pull. Possibly, after all, water may be drawn up from the top as if it were a rope. Strange to say, experimentation has gone quite far in proving this to be the case. But there is a difficulty.

The rise of water to the top of a tree is dependent upon evaporation, which makes room for the continual upflow, and gives rise to the strong absorptive pull, or osmosis. This being true, if a plant or a branch is placed in an atmosphere so saturated with moisture that evaporation is impossible, it will be unable to keep the water flowing up its stem. Yet experiment has shown that the intake persists, though it is slowed up, even when the leaves are entirely submerged in water. So the rise of the water still remains a mystery.

A tree manufactures its food direct from earth and air, a thing the animal cannot do; and though it has no lungs, nor anything corresponding to such a device, it feeds life's constant fires by taking in oxygen night and day. And how can a tree breathe without lungs? Another mystery!

It is when we consider the tree as a plant made to conquer difficulty, a sea creature living on land, that we see its lofty waterworks in their full significance. The tree was a very bold and original idea in nature; and the steps leading up to it were four. First in the order of development came the primitive water plants, the thallophytes, floating freely about or living in the saturated soil along the shore. And in those days there were no other kinds of vegetation. Second came the amphibious plants, such as the mosses; third the woody plants beginning with the ferns; and fourth the most modern woody and two-sexed plants of this highly mechanized vegetable age.

In the mosses we see vegetation crawling on its belly up towards the dry land. Stealthily and cautiously it draws away from the water's edge, lying low. It must not venture far, for it has no true roots; and it cannot raise its head out of the moisture. At first it was but a thin sheath of cells, lying flat on the mud; then it became several layers thick, the moisture being passed from cells

below to those above by absorption.

Finally, the great idea came to pass in the form of a fern. Here was a vegetable mechanism with true, running roots, which the moss has not; and it possessed a woody stem provided with tubes for conducting water. With the invention of the fern, piping the water upward, while the roots struck down to bring it from below, nothing more was necessary to the making of the tree. It only remained for the stock company of cells to go ahead and, in modern parlance, construct a "bigger and better" plant.

Water is the food and life of the tree cells. Every cell had to be immersed in water. And that is just what came to pass. Every cell in the top of a tree continues to be immersed in the life-giving water. Between a cell in the sea and one in the topmost twig there is no essential difference in situation. And the reason is that everything is done to control evaporation and hold it within bounds. Every leaf is coated with a preparation that most effectually seals it. Air can enter and water escape only through microscopic openings called stomates on the under sides of the leaves; and every stomate is capable of being opened or closed according to conditions. The whole trunk and every limb of the tree are jacketed in the protective, suberized bark. There is nothing more waterproof than bark, more stubbornly impermeable. It is because cork is so waterproof that it makes stoppers for bottles and gaskets for engines. It is because it is so impermeable that it is ground up to make linoleum. A tree, from head to foot, is armored against evaporation. Consequently its cells, though they hang in the very eye of the sun, are in water as wet as that which surrounds them in the sea.

It is when I look at a tree from this point of view that I feel like pinning — or nailing — a medal on its chest. If a man is the height of achievement in the animal world, so is a tree in the vegetable. A bronze tablet really ought to be hung on a tree here and there to memorialize scientific facts. The inscription could be a very simple one, as, for instance:

HERE STANDS
THE KING OF VEGETABLES
A SEA CELL THAT BECAME
AMBITIOUS

This Little Pig Went to Market

Condensed from The Saturday Evening Post (March 23, '29)

Katharine Dayton

PRIMARILY, of course, we went for the same reason that most of the other little pigs were going — that is, to make some money quickly without working for it. But other things led us to take the final plunge.

For instance, we realized that our abysmal financial ignorance was largely responsible for our rapidly waning social popularity. Of what avail was it to smother ourselves with Houp-là perfume, to have healthy gums and that alluring springy walk, to push back our cuticle daily with Ouch-o before applying La Gory nail polish, to know what to come back smartly with when He said, "*comment allez-vous, mademoiselle?*" at an evening party, and so on, if, the minute He began on the one about the man who bought General Motors when either he or it was a baby — we always forget which — and now look at it, we got that tired, achy feeling coupled with overpowering drowsiness? In the Naughty Oughtys it may have been considered very fetching for a young girl not to know how dividends come, but in these Tedious Twenties, believe us, it gets her exactly nowhere. If she doesn't know the answers to such cryptic, not to say goofy, questions as "What do you think of Amalgamated Whiffets buying into Wingle Mattresses?" all the Emily-Post she has learned will not prevent her dinner partner from leaving her flat and going into a huddle with the nearest available little group of serious speculators. Then, too, such terrible people — people who didn't look as if they knew enough to read a taximeter, let alone a board in a broker's office — were continually being pointed out to us as having made fortunes in Crude Oatmeal or Public Nuisances or this and that. So in we went. And now we want our experience to help other girls.

First of all, we want to say that the prevailing idea that it is easy to make money is bunk. We honestly don't know when we've worked so hard. With this distinctly understood, let us pass on to the next step — which is getting something to go into the market with.

Some people use shoe strings, but fortunately we had some old Liberty Bonds we had been cutting $1.17 and $2.03 off for

years and years, until we were sick of the things; as well as a couple of bonds of something-or-other with pictures on them that had always got on our nerves.

These bonds had to be converted — which is just great big Wall Street talk for sold, so don't be frightened. The way to convert a bond is to take it to the nicest-looking young man in your bank and say: "Mr. Cratchy (or Meese or Fimple or whatever the little name plate on his desk says), I'd like to sell these bonds." He will say: "At what price?" Whereupon you just go deaf till he says: "At the market price, I suppose." (Market price is what you sell below and buy above.) This is your cue to nod graciously, and it's practically all over but signing the receipt. The joke is that with all this monkey business about market price your bond will sell below it. Don't ask us why — it just does.

And now you must buckle down in earnest and get tips. The best kind of tip to get is straight from a Captain of Industry, which is just a teentsy-weentsy bit harder than putting salt on a birdie's tail. Personally we have found it easier to get a taxi on a rainy night after the theater than to get an introduction to a Captain of Industry, but maybe you go with a better crowd than we do, or are in the Follies, or something.

Then there is the more easily procured Tip Indirect, as it were, that you get, say, from Henrietta Whimple's husband — you know, the short fat one with bad teeth — who has a brother in somebody's office — anyway, it's in Wall Street — who has a secretary who has a friend who works in Morgan's who said she'd just made a date for the Old Man to have lunch with J. W. Tickle of Tickles Gum Arabic — which must mean *something!* Again, some people get just as good results by choosing their stocks in a blindfold test. You never can tell.

Well, we kept at it, and finally we got a tip — two, as a matter of fact. One tip was to buy what we will call Gurgle Oil, because its real name is so silly; and the other was to buy Premeditated Gas and Electric. Both were in line with our policy of buying, not great big expensive stocks, but little stocks around $30 that needed someone to mother them.

There is nothing, we believe, so calculated to give one a sense of power, so conducive to that wonderful beef-wine-and-iron feeling, as being on the market. Take, for example, our buying of Gurgle Oil. We had planned to buy it at 37, and had done a great deal of intensive figuring on the backs of old envelopes on that basis. Now, we wouldn't do anyone an injustice for the world, and of course there's no way of ac-

tually knowing whether, when our broker started to execute the order, he didn't stop to watch a safe being hoisted or a sky-writer or something — anyway, Gurgle was 40 when he got the order in, and it's always seemed fishy to us. But that's neither here nor there. The point is that no sooner had we bought it than — as if we had been Queen of the Fairies and stamped our foot above the hitherto comparatively sterile oil fields of Oklahoma, Texas, and so on — not only did the stock fall five points but oil fairly rushed, gushed and slushed from the fallow soil, prices were cut hither and yon, and the financial pages of the leading newspapers carried headlines to the effect that oil was depressed, which we thought was such a plucky way to put it! From that day to this Gurgle has lain where it fell, so to speak.

By the time we had got around to Premeditated Gas and Electric, our broker reported that it was 50 that morning instead of 34. Well, sir, maybe we weren't hopping. But by scuffling through the financial pages we found ourselves some Premeditated G. and E. for only 30, my dear, and we just grabbed it. What a good laugh we all had afterward when we found they were warrants instead of stocks — we'd be glad to explain the difference right here, but we feel you'd remember it longer if you looked it up yourself.

The next and last step is to sit back and just wait for your stocks to go up, down, or just sidewise, as is often the case. At least two hours daily will be given by the tyro to Envelope Computing. Try as you may, you cannot avoid the practice — the lure of an old envelope is irresistible at this stage in your financial education. Glorious hours are spent computing what we have gained or lost since yesterday; what we would have made if we had done what we intended in the first place. Naturally, when it's all over, you haven't any more actual money, but on the other hand, it hasn't cost you anything but time and old envelopes, and it's kept you out of crowds where you might have got the flu.

We almost hesitate to mention the Ticker. Yet there is a poise, a *je ne sais quoi*, a *dégagé* something about reading a ticker that can be gained in no other way. To date we must confess that we have only progressed in our ticker reading to the point where we can let the tape slide through our fingers while we look about as intelligent as a baby reading a newspaper. But we intend to keep at it until, if nothing more, we prove to our own satisfaction that the people we see reading tickers really are reading tickers. Personally, we have our doubts.

The Story of the "Eaglet"

Condensed from The Mentor (December, '28)

Norman de Lesseps

IN that last hour a great stone eagle, surrendering to the roaring storm, fell from the cornice of Schönbrunn palace. The startled Austrian sentry in the dark courtyard below looked up at the lighted windows above and knew that another eagle had fled its cage. L'Aiglon, son of Napoleon, was dead. Dead at 21. And who knows that, for the peace of Europe, it was not best?

He was buried by the Hapsburgs, his jailers. Upon his pallid face his triumphant enemy, Metternich, Chancellor of Austria, and chief schemer of the Holy Roman Empire, gave a last look — and smiled. The wasted body of the boy who was born to command Napoleon's regiments was ludicrously wrapped in the cloak of an Austrian colonel, far too large for him.

This boy was born in the palace of the Tuileries in Paris on March 20, 1811, to Napoleon and the Archduchess Maria Louisa, daughter of Francis, Emperor of Austria and King of the Holy Roman Empire.

"Behold," says Napoleon to his marshals on the eve of their departure for Russia, which is to be conquered for the child to play with, "the King of Rome, who will one day command your sons!"

There is a mighty cheer, at which perhaps the baby cries, as what baby wouldn't. And Maman Quiou, his nurse, takes him in her arms to the apartments where his featherbrained mother is already writing piteous letters to Metternich. In case Napoleon fails — in case — would her father be kind to her — and her son? But above all, to her?

Napoleon leads his Grand Army to Russia, which first surrenders to him, then swallows him. Vainly Napoleon tries to rally his starved, trapped soldiers, holding up before them the portrait of the infant:

"It is for him that you fight."

But the Guard is silent. Glory has departed. Disaster sits in its place. Shed more blood for the child of a falling father? Why?

Back in Paris the King of Rome, whom the world calls "L'Aiglon" — The Eaglet — struts his nursery in the uniform of a general. Upon his small chest rests the insignia of the Legion of Honor, which he had found in his cradle when he first lay there. Already his violent temper, his uncontrollable rages, are making

Maman Quiou call upon the nursery staff to behold a Napoleon of Napoleons.

But Napoleon has returned to France in gory tatters, defeated. At Fontainebleau he abdicates his throne, making his son, The Eaglet, his successor. It is a proud, defiant gesture and can come to nothing. Already Maria Louisa of Austria is gathering a little wealth together and preparing to flee to Rambouillet.

Metternich will not allow her to come to her father till she agrees to put her fate and her son's in his hands. At last she surrenders. She will agree to anything. Napoleon is on his way to Elba, a prisoner. Maria Louisa is willing to pay Metternich's price of safety.

"Now," says Metternich, "for the headstrong child."

In Vienna, L'Aiglon is presented to Francis, his grandfather.

"I do not like him," storms the boy. "He has an ugly face."

But his royal tantrums no longer concern Maria Louisa. She hands the child over to Metternich and takes herself off to Italy, where she has been given the Duchy of Parma. With her gone, says Metternich, the reduction of this child will be easier. A professional assassin would have solved the problem a century back. But now the way must be longer.

Upon the child Metternich goes to work forthwith. He will wipe out Bonapartism.

Maman Quiou is dismissed because she loves the child. The boy demands that he be permitted to write to his father. There is no opposition. He writes, but the letter never leaves Vienna. Metternich sees to that. Brokenly his father writes to him, "Why do you never write to me?"

Of course the child never hears that. "See," he is told, "your father has forgotten you. There is nothing from him." Austrian tutors insidiously teach him that his father was a criminal, that his cruelties have brought him to a cell. The boy protests, but he is young and quickly forgets.

His name has been changed now to Duke of Reichstadt, which is a degradation. Austrian clothes have replaced his French uniforms. And yet the Corsican fury is still within him. It is not easy to break the eagle spirit. A stern task — even for Metternich. When he is introduced to his small cousins — archdukes and archduchesses — in the garden at Schönbrunn, the Austrian Imperial Palace, he scorns them.

"Franz," they cry, using his new name, "come, play with us."

"My name," he shrills, "is Napoleon." And he strikes at an archduke.

A flunky calls him "Your Highness." Slashing at the man, he storms:

"I am *Your Majesty*. I am the little King of Rome."

"So," breathes Metternich when this is carried to him. "Then we must be at greater pains. We must forbear to rear another Napoleon."

The pressure becomes stronger. Metternich spreads the rumor that the boy is a dunce, a dullard. More doors are locked upon him. Presently, when some of Europe grows restive beneath the yoke of the Holy Alliance, there may be cries for the son of Napoleon. His presence before the malcontents will inspire, even as his father inspired. They are told that the boy is stupid. But they never see him.

Slowly, under this pressure, the spirit collapses. At 15 he feels disgraced because he wears only a sergeant's chevrons. That they are Austrian chevrons is not his plaint. He has lost his contempt for the Hapsburg livery. What would they have him do? He was ready to obey.

At 17 this surrender is rewarded by Metternich. The boy is made a captain of chasseurs, and he kisses the hand of Francis in gratitude.

He is made a colonel of Austrian infantry and throws himself into the army life with a fierceness that gives the cunning Metternich to think. After all, is the son of the cursed Bonaparte playing a rôle? Is he pretending? Will he one day turn this Austrian teaching against his teachers?

But one day the boy faints at review. The doctors find that his lungs are affected and that he will not grow well in Vienna. Italy, they tell Metternich, will perhaps save his life.

Prolong his life? Why? asks Metternich of himself. So the youth is encouraged to exert himself to even greater efforts on the field. His vanity is played upon. At maneuvers he outshines all the Austrian staff.

Avid for prolonged applause of this kind he stays in the field with the army. He is carried off with pneumonia. Metternich directs that he be taken to the rooms his father occupied in those bitter days when he, Metternich, was forced to bow his head and bend his knee to France.

And there the boy lay until the night that the stone eagle fell from the roof of Schönbrunn. Murdered? Would you call it that? Europe gave it that name for a time, but Metternich had cleared his own skirts of the charge. He had caused an autopsy to be held, and the physicians, whom he had selected himself, denied the accusation.

Trading Politics for Business

Condensed from The Review of Reviews (April, '29)

Robert W. Winston, Formerly Judge of the Superior Court, N. C.

UNTIL the last national election Reconstruction had left in southern politics little but bitterness, passion, and spite. Amid such surroundings southern industrial life stagnated. There was little civic consciousness or coöperation, and few industries. Cotton was still king. Yet the 1928 elections were not unexpected. The way had been blazed.

In the Upper South preparations for the shift from partisanship to business had long been under way. First came the intellectual awakening. Groups of teachers in southern colleges had spread the good news that the South is a well favored land, held back only by poor leadership and a false emphasis. These brave men demonstrated that the teachings of Calhoun and Jefferson Davis were a grave fallacy. They showed that agriculture was not more desirable and profitable than manufacturing, and that a one-crop tenant system is suicidal, and caste distinction fatal to progress. Adam Smith's doctrine of free trade might work on paper, but in practice it would not. Newspapers joined in the fight. Freedom of thought, universal education, diversified industries, more factories — these and like practical topics filled southern news columns.

Governor Aycock of North Carolina, seizing upon the thought that the white man could not rise unless the black man rose with him, devoted millions of public money to education, education for white and black alike. States, counties and cities took up the work, abolishing small one-teacher school houses, and consolidating the districts. Libraries were installed, free night schools opened. Movies played an important part, the most backward sections thereby visualizing the progress of their more enterprising neighbors.

Then came health campaigns against hook-worm disease, typhoid and other contagious troubles, followed by propaganda for better rural living and more comfort for the people at large. Factories were built, winter resorts sprang up, hydro-electric plants were developed, and hard surface roads built. Trucking and stock raising, cheese factories and creameries, made their appearance. Industries were diversified; and King Cotton was trembling

on his throne. Moreover, as far back as 1893, industrial leaders of the South had begun to desert free trade for the doctrine of protection.

Right or wrong, southern industrial leaders came to look upon progress and prosperity as synonymous with the Republican party. In North Carolina, I venture to say that there is scarcely one very wealthy national Democrat. And in other industrial southern states conditions are not unlike those in North Carolina. Politics has ceased to be a matter of hate or sentimentality, and has taken on a practical business aspect.

It was no accident that swept the Old Dominion and four sister Confederate states—North Carolina, Tennessee, Florida, and Texas — from the party of Jefferson Davis into the party of Coolidge, Mellon, and Hoover. They are five of the most forward-looking southern states, with the smallest Negro population. Long ago, rumblings of insurgency had been heard in these states. In 1920, more than 200,000 white votes in North Carolina were cast for Harding. In November, 1928, nearly 350,000 were cast for Hoover, giving him a majority of 61,000.

Two other progressive southern states, Georgia and Alabama, disclosed decided Republican gains last November. In Alabama in 1924 Davis led Coolidge by nearly 58,000; but in 1928 Smith led Hoover by less than 14,000. Jefferson County, in which the city of Birmingham is located, went about 3 to 1 for Davis, but in 1928 it actually was carried by Hoover. The same story holds true in Georgia: a Democratic lead of 93,000 in 1924 was cut to 30,000 in 1928, and the county containing Atlanta cast more votes for Hoover than for Smith. Atlanta and Birmingham, it should be noted, are industrial centers of national importance.

The spirit of progress was the underlying cause of the disrupted South. Assuming that the Negro question is not thrust to the front and that southern whites are left to work out their destiny, there will be no backward step. A step backward now means bankruptcy. The South has moved out from her isolation to become a part of the industrial world. She is a new land; the Chinese wall is torn down. For 100 years she followed leaders who taught that isolation was an ideal condition, poor land the best neighbor, and that a change from the field to the factory was a change from liberty to slavery.

In the last six years the 16 southern states have issued more than two and a quarter billions in bonds. The interest on this large sum at four percent is 90-odd million dollars. A people involved in a debt of billions

cannot afford to waste time on sentimentality or hate. If they do, the sheriff will surely get them. To succeed now the South must be up and doing, employing every human agency to this end. If the South does not go forward she must go backward. Politics is not morals, politics is business, and Hancock was right: the tariff is a local issue, the tariff is meat and bread.

These principles the southern people are beginning to understand. Peanut growers now see that they cannot compete with the pauper labor of China and Japan, where peanuts are grown at a cent and a half a pound. It is also seen that mica mines cannot compete with foreign mica, and that the same holds true for the brick industry. Each of these industries, together with tobacco, tomatoes and numberless others, are now beseeching Congress for protection. The South has at last discovered that her job is manufacturing; that while she cannot compete with the wheat and corn fields of the West, she can compete with the best in factories.

Climate and labor make this possible, as the following contrasts between North Carolina and certain other states show: Savings that North Carolina offers over the Pennsylvania, New York, Massachusetts sector are half in fuel costs; half in clothing costs; half in vegetable costs; half in labor costs; about half in general costs; and there is more comfort in North Carolina's predominant small city population.

These figures imply that in a few years certain northern states will have no great need for a tariff, or for a Republican party, while the South will be wedded to both protection and Republicanism. In the last election, Massachusetts and Rhode Island went Democratic, and Virginia and North Carolina went over to the Republican column.

Vast industries in the South are largely dependent on the Government for protection and support — business and governmental protection going hand in hand. Shall a people favored as are the southern people fail to realize these significant facts? In the past they have missed golden opportunities, despising or neglecting their Government and going without governmental assistance. Shall they continue to theorize and starve, or be practical and wax fat?

The best answer to these questions is the break-up of the solid South in the last election. "Have done with politics — we're out for business." This seems to be the southern slogan, and in Dixie we may soon expect to see the flag of our country flying from the housetops as in New England and elsewhere.

History in Everything—Even Pawnshops

Condensed from The Century Magazine (February, '29)

Avery Strakosch

YEARS ago, I had known "Uncle" Moe when he owned a pawnshop on Eighth Avenue in New York City. Last spring, while making a walking tour of the Riviera, I found him living, under an assumed name, in a beautiful villa in an enchanting town just over the Italian border.

"You must never divulge my secret in San Remo, that I was once a pawnbroker!" he began. "It is an honorable business, but alas, it will always have a dishonorable name!

"I have known many pawnbrokers who were fine men. There was my grandfather and my father — both honest to a fault. I, myself? My career is an open book! And yet — well, my own children have no idea their father was a pawnbroker! For years, on the side, I traded in real estate — and as far as they know, my father and grandfather did likewise. I wouldn't have them know the truth. I sent them abroad to school. I refused to see them become social pariahs!

"Pawnbrokers all hate their business. There isn't one of them who would stay in the business if he knew how to do anything else that would bring him the same income. As the pawnbrokerage business is almost always inherited it's hard to get away from it. It goes from father to son, and more often from uncle to nephew — that's where the pawnbroker got his title, 'Uncle'.

"Do you know how the business started? Here in Italy, two Franciscan monks were the first to start the modern pawnshop. They believed the poor needed material help first and spiritual comfort afterward. All the grateful borrowers flocked to them, and hence arranged their journeys to Paradise through the Franciscan order! Their competitors for souls, the Dominicans, were enraged at what the Franciscans had put over on them! What a picture! One order considering the pawnshop a device of the devil, while the other gave it full benefit of clergy! Savonarola himself finally opened the first Florentine pawnshop, surrounded by Dominican brothers, horror-stricken at the proceedings! Imagine! And best of all the Pope in Rome, an extravagant old fellow, agreeing to it all. What a borrower *be* was. Nothing of value remained stationary in the Vatican in his day.

Papal plate, furniture and jewels, anything he could raise money on — there is even a record of his pawning statues of the Twelve Apostles!

"My people did not originate the business, as popularly supposed. But the Jews were as bad as the Christians! Many of them were usurers. People tried to borrow first at the pawnshop because the interest rates were low, but if their collateral was insufficient, they had to go to the usurer. It became easy for the public to associate the pawnbroker and the usurer.

"Few persons realize that a pawnbroker, more than any other person, has to live by the letter of the law. In New York, or in any other American city, before a pawnbroker can get a license, he must furnish the best character references. He must also be a man of established means, for he has to pay a high price for his license, and post a bond of at least $10,000. He must always have several hundred thousand dollars cash at his disposal so he can lend large or small amounts at a moment's notice.

"Before the war, and especially before prohibition, most of our steady customers were among the poor. Those were the days when you could tell it was Monday without looking at the calendar. I can remember when I was a child, the fear I had of the regiments of roistering Irish, soaked in whisky, who crashed my father's pawnshop at the beginning of the week. Saturday, pay day, they returned for their belongings. This performance was repeated week in, week out. They borrowed at the rate of three percent a week. Yet, if you had refused them money your shop would have been wrecked. I am against prohibition, but I'm glad it did away with the men and women who would have taken the clothes from their children's backs if they could have found a pawnbroker heartless enough to lend to them on such collateral.

"And who will ever forget the panic of 1894! Thousands out of work and hungry. What a friendly place the pawnshop grew to be then. We nearly killed ourselves working on double shift, to keep open night and day. We often advanced money on utterly worthless things so the people could buy food.

"War, prohibition, and fake jewelry were the blows that killed the pawnshop business. The war developed all those entreaties to buy Liberty Bonds on the installment plan. People who had never saved, suddenly began. Saving became a fetish. They kept away from the pawnshop. It was no longer necessary.

"On the other hand, the war brought us new customers. Middle-class business men who went

overseas with the premonition they wouldn't return. Before they left they pawned everything they had. Thousands didn't come back and the pawnbroker lost both his loan and interest. Of course, he could sell all unredeemed things at the end of 13 months, but one very seldom breaks even on such forced sales.

"The final blow came when the French dressmakers decreed that women should pay large sums for imitation jewels that are worth less than their settings. Fortunately, however, there will always be a certain class of persons who invest in diamonds — the best portable security in the world, quickly negotiable from Cape Town to Shanghai.

"The big diamond owners are in a class by themselves. They are the secret borrowers. A rich woman will seldom admit to her banker that she is so hard up for cash she needs to borrow on her jewelry. She'd rather go to a pawnshop where she is not known, where no questions are asked.

"A prominent woman once brought me a long necklace of blue-white, square-cut diamonds. I loaned her $56,000 on it. She confided to me that she was borrowing this money to help her husband, whose reputation would have been endangered, his business lost, if his associates had known his financial embarrassment. You'd be surprised at the well-known names on many a pawnbroker's book of records.

"I know you think I've painted the pawnbroker as an angel. Well, if he is, it's very often because he has to be. Pawnbrokers have less chance to be dishonest than other men. They are all under municipal supervision. They are under oath to make a written report, on special cards furnished by the police, of every loan they make. A Pawnshop Inspector arrives when least expected, checks up the pawnbroker's books and looks over every item he has taken in. The police have to have confidence in pawnbrokers. They depend upon them to help locate lost or stolen property to the tune, in large cities, of about two hundred thousand dollars a year.

"There are over 5000 watches and 6000 pieces of jewelry pawned every day of the week in New York City! In the business districts the average daily loans are 15 to 16 thousand dollars.

"There are 191 registered pawnbrokers in New York, but the number is growing less each year. You see the game is no longer worth the name!"

The wind came stronger from the sea. It grew chilly. Uncle Moe called for a wrap. The servant placed one over his shoulders. Uncle Moe sat lost in thought, the old Eighth Avenue look of weariness had returned to his eyes.

Learning How to Live

Condensed from Harper's Magazine (February, '29)

I. A. R. Wylie

TAKING three-score years and ten as a very handsome average of life, we have to subtract, as things go, 20 years of preparation for this world, and at least 30 more to what we call, oddly enough, "making a living." In our spare time we do what we can to live. But naturally it is not a success. And the day when we plan seriously to start living either never comes, or it comes too late.

Mercifully we are seeing, in our own time, a revolution whereby active life is being extended into what was once old age. But we have not yet improved much on the belief of our ancestors that it is necessary to waste at least 20 years in a make-believe world preparing for a make-believe life. Cannot actual life be extended into the waste years of childhood?

My chief witness in support of my theory must be myself. When I was a girl of eight my father presented me with a bicycle. And when I had learned to ride it — among the horse-busses of Regent Street — he put money in my purse and told me to go and have a look at the surrounding country. At the age of ten, except that I could read fluently and write after a fashion, I was quite uneducated. On the other hand, there was not a town or village within 50 miles of London that I did not know as I knew my own street. There were few inns or public-houses where I had not been a guest. At the age of 11 I set out with my bicycle, my bundle, a fraternal blessing reinforced by a five-pound note, and came by devious ways to the University Arms, Cambridge, and there ordered my room and my dinner with the sang-froid of the seasoned traveler that I was. I remember that I stayed a week, spending my days exploring the country round and my evenings at the local theater and a traveling circus. I made many friends in the course of my wanderings — mostly of a low-class male persuasion — and it was my special pride to "take on" the sturdiest cyclist and beat him on the steepest hills — a challenge that often ended amiably with bread and cheese shared at the nearest pub. As to my fellow-creatures, not the scurviest tramp among them treated me other than with decent good-fellowship.

When I was 12 my father, who

evidently thought that it was time for me to spread my wings, gave me 100 pounds and a round-trip ticket to Norway. Until quite recently I possessed my diary of that adventure. The spelling was atrocious, the observations vivid and expressed with a simplicity and force of which subsequent education, alas, deprived me. I chose to stop off at Trondhjem. As usual, I had made friends with my fellow-travelers and, more especially, with a youth who, misled by my precocity and encouraged by my apparently unprotected state, had had to be firmly snubbed. My knowledge of life, however, gave me a cool and complete control over the situation, and he became as a consequence an excellent playfellow. Indeed, touched by his respectful attitude, I wandered down from my hotel at midnight to say good-by to him and to certain of the crew and passengers, and subsequently lost my way home. Since I could not speak Norwegian and had forgotten the name of my hotel, I spent the night exploring the docks and streets of Trondhjem and only with the dawn stumbled on my headquarters. It was the only time I can remember feeling faintly disconcerted.

In the intervals between my travels I read and wrote. I produced several newspapers and wrote uncounted short stories. I read everything I could lay my hands on — Shakespeare, Thackeray, Dickens, Meredith, Du Maurier, Wilde, Dante, and all the vulgar comics of the day. I devoured cheap candy and *The Heavenly Twins* — a scandalous novel long since forgotten — and thus made acquaintance with "The Wages of Sin." I patronized the British Museum and wrote a text book (unpublished) on the Ptolemies. I visited the theaters, coming home at midnight with my own latch-key. I saw Ellen Terry, Irving, Coquelin, and Bernhardt in their prime. I learned of injustice and corruption in high places through the "*affaire Dreyfus*" and became a passionate defender of that unfortunate gentleman.

Eventually I was sent to school and wasted several years acquiring so-called knowledge which, like most educated people, I promptly forgot. Nevertheless, it was a useful experience. It revealed to me that there were queer people in the world and that I must be prepared to put up with them. Also that, from their point of view, I was rather queer myself. The intelligence of my fellow-pupils seemed to me puerile. They might know the name of every river in England, but they couldn't cross the street without a nurse. They might be able to add and subtract but they had no idea of the value of money.

They had never stood outside a pub in the rain, with sixpence in their pockets, debating the relative sustaining value of two poached eggs or a ham sandwich. They knew nothing of sex or bankruptcy or divorce or crime or politics or poverty and nothing vital and real about art or literature.

After that interlude I resumed my own career. I worked, I wrote. I pitched my tent in Belgium and in Germany and traveled whereever I could get to on the strength of my earnings. By the time I was 20 I was self-supporting and, except for the friendship of my fellow-creatures, self-sufficient. Most of the problems of life had been actual to me for ten years at least, so that I was not easily daunted or taken off my balance. My long acquaintance with the facts of sex, presented to me when I was detached enough to take them coolly and as a matter of course, gave me a peaceful adolescence. I knew the worth and the unimportance of money. I could start for Timbuktu without concern. I had sated my appetite for cheap candy and had begun to discriminate. I made the mistakes inherent to my temperament, but I was saved from much second-hand thinking. And in 20 years I had traveled as far in life as many of my contemporaries would go in 40.

It is difficult to evaluate the benefits of those early days, but I feel that I have at least been alive for 35 years out of my present 42. And I flatter myself that when I come to die and move on to another sphere I shall be able to give my new fellow-travelers a fair account of the place I came from.

Maturity is an artificial conception. I was called upon to be mature at ten, and in reason and common sense I became mature just as any average human being would do if given the chance. To begin real life at 15 or 20 is too late. It is out of proportion to the average length of life.

It will be argued that children handled as I was would run grave risks. But this depends largely on custom. If all ten-year-old children were treated as adults they would run no more risk than they do now at 15 or 18, or whenever it is decided that they have become reasonable. But even as things stand the risks are not appreciably greater than are normal anyway. Something might happen. But in any case something might happen, and one day must happen. The world is a dangerous if fascinating place, and to play perpetually for safety is as ridiculous as dodging lightning in a thunder storm.

We have, in fact, only one real concern in life, to live — live dangerously since we must, but at any rate all the time that fate allows us.

The Screen Speaks

Condensed from Scribner's Magazine (April, 29)

William de Mille

PEOPLE who have been in the habit of alluding to the motion-picture as still in its infancy have been shocked to see it give birth to a child of its own. "Talkie" is the child's name, and its parents are Mother Movie and Father Stage. The sturdy infant is growing at an unheard of rate, and, like some human children, is still so unlovely both to the eye and the ear that only its mother really loves it and believes it will grow up into a fine, big, beautiful person.

Because of the advent of the Talkie a complicated industry which has taken over 15 years to develop is, to a certain extent, swept away overnight and must prepare to produce at once and in quantity a product it knows almost nothing about, with new and little-understood tools and a personnel of novices.

In the studios, gone are the shoutings, the music, the noises of electric lights, the hum of the cameras, and the tense directions through megaphones. Instead, a silent group of actors awaits a silent signal upon a silent stage. Between "shots" groups of quiet-voiced players bring forth dictionaries and discuss meanings of words and their pronunciations.

In many cases the stage actor who doesn't know picture technic is no better off in this new art than the screen actor of no vocal experience; except that it is frequently easier for the stage actor to learn screen technic than for the screen actor to develop a voice which he doesn't possess. Pure tone and distinct enunciation are the prime requisites. At the present time the ideal actor for talking pictures seems to be the stage actor with screen experience.

It is interesting, and frequently appalling, to realize how much screen personality may be changed by the addition of a voice. The actor's very appearance seems different. Many delightful young women lose all their charm the moment their voices are heard; stalwart "he-men" may shed their virility with the first sentence they speak; the rolling Western "r" gives the lie to an otherwise excellent "society" characterization, and uncultured enunciation destroys the illusion created by beauty. In very few cases does the voice of a screen idol satisfy "fans" who, for years, have been imagining it. On the other hand, those

players who have beauty of voice find a new world open to them. No longer is it necessary to make personality 100 percent visual. Actors who have been almost unnoticed may arrest attention vocally. It is Judgment Day, and many will be raised up while others are cast down. There will be many heart-breaks before the players adjust to new conditions.

There are, of course, many technical difficulties. The same film in the same theater sounds differently according to the size and position of the audience; each theater varies acoustically from every other, and few of the large picture houses were built to meet conditions which proper reproduction of talking pictures demands.

The director of a picture must now compose each scene for the microphone as well as for the camera; distance and direction of voice must be considered at the same time as distance and angle of the face. The microphone tends to magnify certain types of sound and minimize others, which makes it hard to get a true aural balance.

But in spite of all this the art of spoken screen drama will probably develop much more quickly than the silent picture did, because both its underlying arts are well developed. The vocal photoplay is a new combination of two older arts rather than the creation of a new art, and the major problem to be solved at this time is to prevent the technic of one art robbing it of the values contributed by the other.

As the mechanics of vocal reproduction are developed, the talkie may even surpass the stage in its ability to carry the audible part of drama clearly and distinctly to an auditor far removed from the stage. Still, the talkie cannot quite follow the form of the drama, because its percentage of eye-drama to ear-drama must be considerably greater than on stage. Many of the more subtle moments in the talking picture can sustain themselves by sheer pantomime because the audience is brought so close to the character as to make facial expression alone tell story and express thought to a degree impossible in the theater. This element of delicate pantomime, developed with such care by the motion-picture, will not be lost in the new technic, but it will be enhanced by that fulness of thought which language alone can give.

One basic structural difference between stage drama and screen drama is that the greater mobility of the photoplay has made it advisable to include every important point of physical action which occurs in the story; while the stage play has a tendency to leave out much of this incident and allude conversationally to

what has happened between the acts. Stage drama, more than photodrama, has usually concentrated its action on certain high spots in a story. It is now a debatable question whether the new story form of the talkie will gain or lose value through the tendency and ability of the spoken screen drama to include those incidents which stage drama leaves out.

As a rule, also, it takes longer to express an individual scene in spoken picture than the same scene would take on either stage or silent screen. In the silent screen its physical action would not be retarded by the longer time necessary to speak lines. A one-act play which takes 45 minutes to perform in the theater has been turned into a talkie of seven reels — a full-length picture, merely by filling in certain important scenes which occurred off stage in the original.

Another conflict of inherited impulses occurs in the matter of tempo. The physical tempo of the screen, so much quicker than that of the stage, finds itself checked by the spoken word, which cannot be made consistent with such rapid movement. Talk cannot be accelerated to the terrific speed of the modern picture without losing all semblance of reality, and movement and speech must harmonize. So it seems that the false speed of the silent picture must be brought down more nearly to approach the more realistic tempo of the stage.

If we take it for granted that the various technical difficulties will be solved, it seems that the new dramatic form has almost everything the stage can offer — and many advantages which the stage has not. It combines the power of the spoken word with the power of the motion picture. A broader canvas is made possible by quick and frequent changes of background, and against this broader canvas will be shown characters in more intimate drama than even the littlest Little Theater has succeeded in depicting. Not since Shakespeare's day has the dramatic form been so fluid.

If the talkie realizes its possibilities, it may become the greatest of all popular arts; it will carry the benefit of spoken drama to millions who otherwise could never see a good play, and at a most modest price; it will make a real national theater possible; it will become a standard of speech for the whole people; it will foster the growth of dramatic taste.

If the new art realizes its opportunities it is probable that, within three years, the silent motion-picture will have ceased to be.

Shall We Sleep Life Away?

Condensed from Plain Talk (April, '29)

Robert Kingman, M.D.

DURING his days of glory Napoleon slept not more than four or five hours at the most out of the 24. His physical and intellectual activities at this time were prodigious. After the battle of Aspern, however, which was his first defeat, he fell asleep and for 36 hours could not be aroused.

Later in life, when his dreams were shattered and he was sent to exile on a remote island, he found it necessary to devote eight or nine hours to bed instead of the four or five that were previously sufficient, and this at a time when he had changed from a life of physical and mental activity to one of sloth and indolence.

There is on record the case of a gambler who could go for several days and nights without sleep, provided he was winning. After a heavy loss, he needed ten to twelve hours' sleep to put him in humor to face reality again.

Many business men work much harder than most of their employes. But if they are interested in the business and making a success of it, they do not complain of being tired. Nor are they as tired after 15 hours of "free labor," as are their stenographers and subordinates after six or eight hours of routine labor that demands neither initiative nor independence of action.

Does this mean that the more we work the less we should sleep? Psychologists are beginning to think so. In fact, many of them are quite sure that this apparently paradoxical theory is correct and that insomnia ought to be cured not by teaching insomniacs how to sleep but by teaching them how to stay awake properly. But in order for the cure to be effectual, the staying awake must be done under circumstances that absorb the interest of the individual and flatter his ego.

If we admit that the conquering Napoleon and the winning gambler and the successful business man were sufficiently rested by being occupied with activities that flattered their ego and were of their own choosing, is there any common factor that enabled them to maintain their health with less sleep than is usually thought necessary for the average man?

There is such a factor, and it can perhaps be better explained by reversing the question and asking if there is not some definite

factor that causes most of us to devote more time to sleep than we actually need. The answer is again yes; and that definite factor is monotony.

Thomas Edison, in an interview, said:

> The man who sleeps too much suffers from it in many ways. The average man who sleeps seven or eight or nine hours daily is continually oppressed by lassitude. There is really no reason why men should go to bed at all, and the man of the future will spend far less time in bed than the man of the present does, just as the man of the present spends far less time than the man of the past did. Really sleep is a bad habit.

Mr. Edison practices what he preaches in that he has reduced his bad habit of sleep to a minimum. He adds:

> Not long ago we had a good deal of trouble trying to perfect the disc record for phonographs. Eight of us then started upon the work with the very definite intention of wasting as little time as possible. For five weeks we put in from 145 to 150 hours a week each at the job. That means 21 hours a day — yet we all gained in weight.

Edison probably sleeps no more than four hours out of the 24. But there is no doubt that if he were put to work in his own plant, under the direction of a foreman, performing regular, monotonous tasks, he would either break down under the strain or be obliged to sleep much more.

The amount of sleep needed by various individuals is never proportionate to the amount of muscular or mental effort they expend. Other men than Napoleon and Edison of intense physical and intellectual activity, like Frederick the Great, Schiller, Humboldt, Mirabeau, John Hunter the English surgeon, and Virchow the German pathologist, have flourished on an average of four or five hours of sleep daily. They were men whose lives were crowded with interest.

The influence of monotony on sleep is well illustrated by the phenomenon of hibernation. During the long winters in the north when food is scarce and they can indulge in none of their customary activities many warm-blooded animals have learned to sleep away the tedious months. This habit of hibernation is not restricted to the lower animals, for inhabitants of some arctic regions spend portions of the winter in a similar state of inertia and somnolence.

Nansen in his polar exile slept 20 hours a day. He certainly was not in need of rest, but he was glad to withdraw his attention from the monotony of the snow and ice.

That hibernation is a natural reaction to monotony and not to extreme cold is proved by the fact that there is a summer sleep or "estivation" among cold-blooded animals in the tropics. This phenomenon is just the reverse of hibernation. The inhabitants of the tropics, as well, pass a portion of each day when the heat is too intense to allow of any diversion

of body or mind in a siesta which shuts out from their consciousness the monotony of doing nothing.

The farmer is traditionally supposed to go to roost with the chickens, and he did before the radio and the automobile gave him something else to do. He slept longer in winter than he did in summer, not because he worked harder in winter and needed the rest but because he worked less and the nights were longer.

The real purpose of sleep is restoration of emotional and sensory tone and not elimination of toxins or repair of waste. It is quite ridiculous to imagine that our bowels or our kidneys or our digestions work better when we are asleep than when we are awake. The exact contrary is true. All these functions are slowed down during sleep, like the rest of the body processes. It is a matter of common knowledge that we have more difficulty in digesting heavy food at night than at noon, and that if a heavy meal is not digested before we go to sleep, trouble is likely to ensue.

The best way of combating a tendency to excessive sleep is not arbitrarily to shorten the hours devoted to oblivion, but gradually to accustom the mind, consciously or unconsciously, to act more vigorously and expansively. Widening the mental outlook and increasing the number of interesting contacts with reality seems, strangely enough, to have the dual effect of prolonging the waking period and of prolonging it without injury to the organism.

There has always been a considerable diversity of opinion in regard to the proper adult sleeping allowance. It has heretofore been generally believed that in the prime of life seven hours out of the 24 should be given to sleep, though some individuals do very well on five or six and others seem to require eight or nine.

Individuals who possess a diversity of interests and who find food for thought and entertainment in everything can maintain their health on much less sleep than these average standards.

The idea that we must spend one third of our lives, 25 years out of 75, in sleep, is so firmly intrenched in the human mind that it is next to impossible to drive it out. It is easier to revolutionize a man's diet, his philosophy, his manner of dress and his ideas of political economy than to convince him that good health is compatible with less than eight hours sleep each night. But our age is one of efficiency. If the average human being can maintain working efficiency on six hours of sleep or less a day, it ought to be known and acted upon.

The Amazing Persecution of Dr. Dix

Condensed from The New Yorker (March 9, '29)

Herbert Asbury

ON a morning in February, 1880, the Rev. Dr. Morgan Dix, rector of old Trinity Church, answered the door-bell of the rectory at No. 27 West 25 Street, and stepped across the threshold into one of the most extraordinary series of persecutions that have ever perplexed the New York police. His visitor was a clerical gentleman, who said that he was prepared to quote favorable terms for the care and training of the three little girls whom, according to a letter ostensibly from Dr. Dix, the rector wished to place in a select academy. The bewildered clergyman explained that a mistake had been made; but scarcely had the clerical gentleman departed than another arrived. Thereafter they came in droves, more than a score calling before nightfall.

Mingled with them were many representatives of Bible societies, publishing houses, and all sorts of manufacturing establishments, all of which had received letters saying that Dr. Dix wished to inspect samples before purchasing large quantities of supplies for various charitable organizations under his control. The postman was meanwhile delivering huge sacks of letters from firms which had not sent salesmen. Next day the procession of callers continued, and the mail was augmented by grave communications from leading Episcopal bishops and clergymen throughout the East, who had received curt notes, to which the signature of the rector had been forged, reprimanding them for not having answered Dr. Dix's letters. Several of the divines hinted that perhaps the distinguished rector of Trinity should consult a physician.

On Feb. 21, 1880, Dr. Dix received a letter stating that Washington's Birthday would be a memorable occasion for the rector, as numerous old-clothes women would call to negotiate for the purchase of Mrs. Dix's entire wardrobe. The next morning a fat woman appeared at the door, demanding that the clothing be produced. Within a few moments, another woman, with a sack slung over her shoulder, rushed through the gate and elbowed the first caller away from the door. The rector retreated, and the women settled down on the stoop to wait, convinced that Dr. Dix merely wanted to haggle. By noon the lawn of the rectory was filled with

the excited clamor of 28 old-clothes women. Several neighbors who attempted to enter the rectory and console the distressed clergyman were set upon by the women, who insisted upon bargaining for the clothing upon their backs. Dr. Dix finally called the police, who drove the women from the yard.

Scarcely had the clatter of their carts died away than a carriage raced through 25th Street and drew up in front of the rectory. One of the city's leading physicians dashed into the house, only to emerge a few moments later very indignant. He had received an urgent call that Dr. Dix had gone into an epileptic fit and was dying. Similar messages had been left at the offices of some 30 other doctors, and it was after midnight when the last of them had come and gone. Dr. Dix slept fitfully that night, and before breakfast was awakened by a half-dozen shoemakers who had been notified to call at the rectory and measure some children for shoes, and before lunch at least 50 men and women who had advertised for work appeared. They had received notes advising them that jobs were to be had from Dr. Dix. About dusk a score of the most prominent clergymen of New York presented themselves at the rectory, having received invitations, to which the rector's name had been forged, to dine with Dr. and Mrs. Dix and meet the Bishops of York and Exeter.

Next morning the leading department stores received curt letters, also supposedly signed by Dr. Dix, saying that the rector had turned their impertinent communications over to his lawyer for immediate legal action. Since no such communications, of course, had ever been written to Dr. Dix, officials of these firms hurriedly sent emissaries to the rectory to assure the clergyman of their undying respect. Dr. Dix next received a letter signed "Gentleman Joe," which said that the annoyances would cease if the rector would pay him $1000. Dr. Dix was instructed, if he was willing to make the payment, to publish in the *Herald* two days later a personal saying, "Gentleman Joe: All right." The police now began to grapple with the problem. Upon their advice Dr. Dix inserted the advertisement as directed, but Gentleman Joe paid no attention to it.

Shortly afterward, a lawyer came to the rectory with a letter to which Mrs. Dix's name had been forged, and which said that she wished to consult him about a divorce. Twenty other lawyers, bearing exactly similar missives, called during the day, as well as an agent for a steamship line, with two tickets to Havana, and a score of persons who, having advertised for lost property, had

been notified that their belongings were being held for them at the rectory. During the next three days at least a hundred persons appeared in response to summonses of various sorts, and about a week later an indignant stranger forced his way into the rectory, accused the astonished Dr. Dix of being too friendly with his wife, and threatened to cane the clergyman unless he immediately made a public apology. Next day the rector received a letter from Gentleman Joe saying that he had thoroughly enjoyed his visit, and boasting of his ability as an actor.

The police made extraordinary efforts to capture Dr. Dix's persecutor, assigning every detective on the force to the case. Gentleman Joe had gone to the expense of procuring stationery engraved with "Trinity Parsonage, 27 West 25 Street," but the printer could not be found; and the police also failed when detectives were stationed at mail boxes throughout the city to open the receptacles, whenever a letter was mailed, and compare the handwriting with that known to be Gentleman Joe's. But it was not until a clergyman of another denomination happened to see a former Trinity Sunday-school teacher on the street and mentioned the fact to Dr. Dix, that the police finally pounced on the rascal's trail. This man, Edward E. F. Williamson, had been expelled from Trinity when, having been unmasked as a person of low character, he scorned reformation and boasted of his amorous experiences in Turkey. Believing that spite might lie behind the persecution, the police began a search for Williamson. He was finally traced to Baltimore, where he was arrested.

Williamson admitted that he had annoyed Dr. Dix, but maintained that he had been impelled solely by a craving for amusement. Williamson was tried on a charge of blackmail, was convicted and sentenced to Sing Sing, where he died.

The police discovered that after his expulsion from Trinity, Gentleman Joe had gone to England, where he served a term in Newgate Prison for tormenting a Hebrew gentleman in London, in much the same fashion as he later persecuted Dr. Dix. Upon his release in 1875, he came back to the United States and lived in Pittsburgh for several years, swindling a few jewelry firms out of small amounts. The police regarded him as a very mysterious person, and suspected that he was the ne'er-do-well son of an English family, and received remittances from his relatives. Apparently he had devoted his life to the commission of small crimes, not for the purpose of gain, but simply to amuse himself.

Sh!—They're Filming "Talkies!"

Condensed from Popular Science Monthly (April, '29)

Norman Foster

I HAD hardly entered the movie studio when a burly individual grabbed my arm.

"Don't move!" he whispered.

"But," I protested.

"S-h-h! Don't talk! They're 'shooting'!"

For a minute or two I stood where he halted me, gazing at a blank wall and a door. Then we were joined by an assistant director whom I had met before, who smiled but immediately put a finger to his lips to forestall my greeting. The silence was oppressive. One scarcely dared to breathe.

Suddenly, a long ring from an electric bell startled me. Instantly, a thousand-and-one noises assailed my ears. The door was flung open with a bang. Everywhere at once, people called to each other, walked about, talked, coughed. Machines hummed. A bedlam of hammering, sawing and scraping seemed to have broken loose and the blare of a jazz band could be heard through the din.

"One long ring," the assistant director explained, "is the signal that the actual 'shooting' of a scene has ended and that normal activities may be resumed. When they start filming a scene, the signal is three rings.

"You see, in making 'talkies' we have a double job. Not only must we get sound into the pictures, but we must keep out sounds that don't belong there. I never knew how many senseless noises there can be until we began making 'talkies.' Now let's go in and I'll show you the stage."

I was a little surprised; I had expected to see many intricate machines, but all that seemed to distinguish the place from an ordinary movie studio were two or three microphones suspended from the ceiling.

"Outside of these microphones," I remarked, "I don't see anything out of the ordinary here."

The assistant director smiled.

"There's plenty!" he said. "For example, this room has been made as soundproof as possible by building terra cotta tile walls with air spaces between. The doors are double. Monk's cloth drapes are hung about to deaden echoes and reverberations. Also, the inside of the walls are treated with sound-absorbing materials. Now look at the cameras."

I observed that these machines

— three of them to "shoot" the scene simultaneously from as many different angles — were enclosed in thick-walled booths, like padded cells. The cameras were pointed through walls of plate glass. These "cells" move on wheels with pneumatic tires.

Next, my friend pointed out that the customary Kleig lights had been replaced by noiseless lamps, also that the floor was covered with thick, gray felt that muffled every step. Even the office desks used in the scene were overlaid with felt pads.

"That's to prevent them from acting as sounding boards to the actor's voices," my guide explained. Then picking up a chair he added: "You see, each chair leg has felt tacked underneath to deaden sound in case it's moved around."

I had noticed, on a mezzanine overlooking the studio, two rooms from which men surveyed the stage. One of these rooms, the assistant director volunteered, is the "monitor room"; the other, the "sound room." In the monitor room an operator hears every word or noise on the stage over a wire, and with a "potentiometer" regulates the sounds to make them natural. From the monitor room, the sound is carried to an amplifier, an instrument which increases its strength several thousand times; thence to the sound room, where it is recorded.

By this time, the stage had filled with people.

"Now watch closely," said my guide. "They are going to have a sound rehearsal. For rehearsals we use wax disks like phonograph records, which permit instant reproduction or a 'play back.' During this 'play back' the sound values can be criticized."

"Silence!" the director commanded, and, after signalling the sound department, pushed a button for the loud rings through the plant. The famous three rings!

Everything in the plant stopped dead. The sound rehearsal was on. The hero sat behind the desk in his office. A young woman entered and, in a short dialog, gave the man her telephone number. This he jotted down on the corner of a newspaper. Exit young woman. A man entered. During their brief talk the hero tore off the numbered bit of paper and put it in his pocket. Exit the man caller. End of scene. One bell!

"That seemed fine to me," said the director. "Let's have a play back."

All eyes turned to a loudspeaker protruding from a wall beside the monitor room.

A rasping sound like static over your radio. Then — "Good morning, Mr. Snell." It was the voice of the young woman in the rehearsed scene. Everything went

smoothly. The dialog came through clearly and well-modulated. Then suddenly,

"Rrrrrrrrrr!"

A noise like a tornado tearing the roof off a barn. What on earth was that? A hasty phone call to the monitor room. A quick consultation.

"Ah, that's it," said the director finally. "That tornado was Walter (the actor playing the hero's rôle) tearing off his little corner of newspaper!"

Another quick conference. Tearing the paper is essential to the action. The director has an idea.

"Moisten the corner of that newspaper and see what'll happen."

This was done. "Silence!" Three bells! On with the play.

The scene was retaken. The cost of this little mishap, the sound man explained to me, was about $500. But had it happened in actual filming, and not just in rehearsal, the noise would have remained undetected until after the developing of the film, and the tearing of a half-inch bit of newspaper might have meant a loss of $10,000!

This, I found out, was but one instance of the difficulties encountered in the "talkie" studio in reproducing ordinary noises. The firing of a gun or the barking of a dog will not record truly. The technician whose task it is to create "realistic" sounds is called the "effects man." It is his job to produce the ingenious devices that make sounds seem natural in the finished "talkie." The simplest odds and ends, such as tin cans, bits of string, odd bottles, and the like, are used in making these sound-imitating devices.

An actor's stage experience is of little help to him in the "talkies." Instead of using the full voice, you have to talk in a low, distinct tone or the play back will make you sound like a hawker. In the soundproof room, also, your voice sounds lifeless. Another difference is that you may not walk about while delivering your lines. Instead, you must make all movements the action calls for, then stop within range of a "mike" to voice your speeches. Coughing and sneezing are unpardonable sins. No wonder, when the tiniest details have to be listened for, that it often requires an entire working day to take one little scene which will run from three to five minutes on the screen!

Does Business Mean Peace?

Condensed from The Outlook and Independent (March 13, '29)

James T. Shotwell

"THE world of credit is a world of peace." This sentence which occurred in a chapter that I had written some time ago has brought me many comments indicating sincere surprise that the peace movement of today could be truly linked in with the most real interests of the business world.

Apparently the peace movement of today is taken as an ethical or religious ideal, but not as an expression of the interests of the business world. Now it seems to me that in this lies the chief misunderstanding of the greatest single reform which our age has undertaken. For I believe that the modern peace movement is a natural product of the industrial era.

We have not begun to realize the importance of scientific discovery and the invention of machinery, which is incomparably the greatest change in human history. We shall never get the right perspective of it so long as we measure history by a mere paltry 18 centuries from the birth of Christ instead of in a stretch of almost countless millennia which reach through the whole evolution of humanity. Professor Robinson has graphically compared the whole day of human existence to the 12 hours of a single day. Each hour would represent at least 20,000 years, and the day is almost over before civilization begins. It is not until about 20 minutes before 12, on this clock of the ages, that Egyptian and Babylonian civilizations begin to appear. The science of today comes in the last few tickings of the clock. Yet in these few seconds mankind has remade half the world in terms of a new civilization.

Looking at man, today, we are inclined to forget the long millennia of savagery in which he conquered other animals by being the greatest huntsman and the greatest killer in the world.

In the second stage of his development — that of settled communities dependent chiefly upon agriculture — the long savage past was not easily thrown off. Community continued to prey upon community in much the same way whether it lived in Greek city states or in primeval rock shelters. Predatory raids brought in the slaves to serve in the household of a Pericles and the tribute of conquered prov-

inces maintained the food supply of Virgil's Rome. In short, the economics of the ancient world was never able to shake itself loose from the hunting, fighting and stealing propensities of the primitive man, a fact which was to be the chief cause of the downfall of the ancient world. Antique civilization rested essentially upon the exploitation of the oppressed and the oppression found its chief instrument in the organization of war.

The Middle Ages continued this blind way of economic thinking. Serfs took the place of slaves but conquest was a legitimate enterprise for the enlargement of wealth, and the trade of arms the one most lucrative profession.

It was the introduction of money more than any other single thing which broke this vicious circle of violence and oppression. It took some five or six centuries, from the 13th to the 19th, before kingship was forced to yield utterly and abjectly to national finance. The slogan of the American Revolution, "no taxation without representation," — which means no taxation except at the will of the taxed themselves, — was therefore the symbol of the closing chapter of an internal revolution which within the state deprived the war lord of the last vestiges of applied force. From the angle of this study, it was the first chapter in the renunciation of war as an instrument of policy.

The internal growth of modern nations was a process of pacification within the state. Now the supreme question of our time is whether the same process which has brought peace within the nation is destined, in the coming era, to bring peace between nations. Judged by the past, this seems at first glance to be the most unlikely of conclusions. The internal growth of nations in terms of increasing coherence and self-consciousness, has rather accentuated than lessened the international struggle and the assertion of the claims of each nation against others. Not only were national wars constantly recurring through the whole of the 17th and 18th centuries, but economic thinking remained predatory; the foreigner was to be despoiled by monopolies or the manipulation of a balance of trade. The dominant conception of trade was still the primitive idea of taking advantage of the outsider and protecting the home market from similar designs on his part.

It is a strange repetition of history that the new states which emerged after the World War have repeated almost in minute detail the 17th and 18th century history of the older nations. Therefore, at first glance, it would seem as though the capitalistic

state fostered international war even when guaranteeing peace at home.

But that first phase of capitalism was a very different thing from the phase of capitalism which is revealing itself today. For in modern capitalism the increase of wealth rests, in the last analysis, upon the exploitation of nature by nature, rather than the exploitation of man by man. Moreover, it is an enriching process which extends to the consumer as well as to the producer, for in its unlimited extension through the whole sphere of daily work, it continually increases the capacity to buy. The problem of credit will therefore coincide with the problem of how to increase prosperity and this means in the long run at least, as the sum total of the process, the development of an international community of interests.

The investments of the industrial world today are for the purpose of making the industries in which they are invested prosper, no matter in what country they are situated, for only by continuing prosperity can the returns on capital be paid. This is vastly different from taking tribute of a conquered province. It is the assuming of partnership in the enterprises themselves, and partnership in business means an interest in the maintenance of favorable conditions of that business. When, therefore, the United States places abroad each year — as it is doing now — investments of private capital which are greater than the whole wealth in its possession when it began its history, it is playing a part in the upbuilding of a community of interests throughout the world which is the greatest of all guarantees of international peace.

Seen in its broadest outlines, it is clear that the international world of finance today has everything to gain from a world stabilization in terms of peace. Though the theory is sound, there will remain the continuing danger of international disorder, just as formerly there was the continuing danger of civil disorder within the state. This danger will have to be met by a higher diplomacy, and by tribunals for matters that are technical or difficult of settlement.

Nevertheless, the aims and principles of international policy are already discernible and these have never been better stated than in the two short paragraphs of the Kellogg-Briand Multilateral Treaty. War, as the free prerogative of sovereignty, is gone and in its place must come pacific means of settlement. The elimination of war is a fundamental principle of legitimate international business.

Adventure in the Modern Manner

Condensed from the Scientific American (April, '29)

Walter S. Hiatt

CONSIDER a few of the achievements of George A. Kerr, leather chemist and master builder, who made the savage wilderness work for him. In nine months he built a dock, an iron and brass foundry and a huge carpenter shop, made seven million bricks, laid a 60-mile railway, rigged up 200 new ox carts, and then built a plant covering two acres, costing two and a half millions and turning out 70 to 80 tons daily of the quebracho liquid used to tan leathers. Kerr is also regarded as the only living expert in all branches of the leather industry.

But let him tell his own story, as he told it to me:

The job before me was to build a town, a railroad, and the world's largest tanning extract plant. To do this I had plenty of experience, unlimited money, promises of machinery to come, a flat piece of land on the upper Paraguay River, a small gasoline boat, and no labor whatsoever. I was 350 miles from the nearest city, and two months from my New York headquarters by cable. There were not ten friendly white men in the surrounding area of 200,000 square miles of primeval jungle. The work was to be done for the International Products Company as part of a plan to put up a plant at the wood source on a forest concession costing two million dollars.

In Asuncion, capital of Paraguay, I was brilliantly entertained by the president and the leading business men, but they all said gently, "Excuse us, Señor, it can't be done. Believe us, we know our country, and none of us has ever gone where you propose to go."

Finally I got the concession, and the loan of some soldiers, paying them wages, of course. They had a fine, faithful officer, and when I took the boat up the river we made quite an imposing party. Everyone wished us a quick and safe return, believing our task to be impossible.

The higher up river I got the more discouraging were reports about workmen. The captain of the boat told me that far up the river were two towns, Suarez and Martinho, ports where foregathered all the bandits and outlaws of Bolivia, Brazil, and Paraguay. He would bring me some of them, he promised, if I would pay the passage and give him a

bonus. "They won't work and they are dangerous, but if you insist, they are yours." I gave him an advance.

As he went on I set about preparing a camp for myself and my soldiers. We made a temporary blockhouse, a storehouse, and shelters for the workmen who were to arrive.

Within a week my boat captain returned. He sent ashore about 50 of the roughest men I had ever seen, with their women. These ruffians swaggered ashore with their bundles, their arms, and their fighting cocks, and began a clamor for food and quarters. We made each man pass through the blockhouse, and there we took his name, his trade, if any, and his knives and pistols. Then we sent them to the shanty.

They slunk away, growling, threatening, swearing horribly. My friend the river captain nudged my arm and whispered: "I explained that you were a rich and foolish American who actually expected people to work, that if they came here they would get plenty of food, and hinted there might be some loot, when they got tired of their holiday. Now you have spoiled their plans."

I had my working nucleus. But I realized those men would never do an honest day's work if they were not outwitted. So I went to them with a guard of soldiers and had it explained that they were to be well treated, well fed, and well paid. In return, I wanted their friendship and aid. If I did not get that I would shoot any man who revolted. I then called together the women, and explained that if they made their men behave they would each get a new dress and a present each week. If their men beat them, I would punish them. If their men didn't work, there would be no food.

I set the men to work building a street lined with cabins — a home for each man and his wife. I detailed men to keep the streets clean, and set up fines for throwing filth about. It came pretty hard to those fellows to work, but their women kept after them, and I kept after the women.

My captain brought me another lot of men, and every captain who stopped was offered the same terms. Pretty soon these vile ports up river were getting depopulated. As nobody could leave the settlement to carry word back, I believe each captain used the same argument — idle living and, eventually, loot.

I soon had my town built, but I began to fear my machinery would not arrive in time to keep the men busy. Then the food supply gave out and there was trouble. I knocked the tops off a dozen boxes of tea biscuits and served that as rations. I next

hurriedly organized my commissary, sent soldiers out to buy cattle, arranged with the Indians for a steady delivery each week, built a slaughter house, and staved off famine and riot.

Meanwhile, I had been waiting for cement for the factory foundations, which did not come, and had been trying to buy bricks. But no bricks were available, so I decided to make my own bricks. Good or bad, the work would keep the men busy. The river captains said nobody had ever made bricks out of *chaco* clay. Therefore it couldn't be done. I had learned how to make bricks however, 20 years earlier in Columbus, Ohio. So I experimented and the result was bricks. I then set the men to work in gangs; they worked rather well by now.

The machinery for my plan began coming along in driblets. When my 17-ton extract boilers arrived I had only a 5-ton crane to lift them ashore. If it had broken under the triple weight, these boilers would have gone into the river.

Each day some new disaster awaited me. When, for example, I got the boilers safe ashore, I found all the brass parts had been stolen. So I had to build a brass and iron foundry to make new parts. The steel frames for my plant had been in a ship that had caught fire, and the heat had twisted them all out of shape. I had to make the peon blacksmiths straighten them. The iron waterpipes for the plant had been stolen. I had to make and use wooden ones. I had to do all the thinking and about one-twentieth of the physical work for a settlement that now consisted of nearly 1000 people.

One day a soldier reported that an American cowboy was in a canoe at the landing and wanted to come ashore. I found a tall, lanky person with a pleasant grin. "My name is Ike," he called, "and I was sort a-lookin' for a job." I asked no questions. Rightly, I concluded that he was a fugitive from justice. But if he measured up, he was more precious than fine gold. He showed no surprise at the gigantic job I had undertaken. He knew the country. We struck an agreement, and he showed such quick intelligence, reliability and sturdiness that he became my assistant chief engineer.

Slowly the building, which as completed stood 75 feet high, with standpipes and chimneys 125 feet high, rose in the clearing. Next, I had to begin to get my quebracho wood to feed the plant. To do this I had to build a railroad reaching back 60 miles into the forest. I had never built a railroad, or operated a locomotive Yet I had to teach men who had never seen one how to do it.

One way or another, at the end of nine months the plant was turning out 60 to 70 tons of quebracho extract daily. It was at this period that all my work was threatened. With the slackening of the hard work and suspense of getting the plant to operate, the men grew restive. There was an attempt to murder me as part of the old plan of the pirate towns for loot.

Soon after this I found that there was another plot afoot. The pirate towns up-river were planning a descent on my settlement, and even some of the down-river villages and the big town of Concepcion. They had secured a small steamer for their raid.

I dispatched my launch to warn Concepcion and to ask for more soldiers. I knew, however, that in a real attack I should be helpless against several hundred men bent on loot, and able to fire from a steamer, perhaps armed with cannon and machine guns. I could take no chances with arming the workmen, as they would be ready to turn against me and rob the stores. By the curious grapevine intelligence of the natives, there was not a soul among the workmen who did not know of the planned attack.

By great good luck, after two nights of waiting, a small steamer came from down-river in answer to my call for help. There was a handful of soldiers aboard. Hardly had it stopped before my plan was ready. I determined instead of awaiting the attack, to attack myself. I got aboard with a dozen of my soldiers, plenty of rifles and ammunition, and bribed the captain to take me to Suarez and Martinho.

We crept into these ports by night, found the steamer the pirates were planning to use, quietly knocked on the head the men in charge, bound them, and so disabled the machinery of the engine room that the steamer was out of commission for many weeks.

On my return I let it be whispered about that another force of soldiers was arriving, although I knew that I would not get them because of the slow ways of the country. But there were no more attacks planned on me so far as I knew during the rest of my stay.

After that, things at the extract plant went along with comparative smoothness, and the output assumed the steady flow of a well-organized plant.

When I was relieved, with the plant in good order, I came away with regret, but enriched by the knowledge that men may do the seemingly impossible if they will try hard enough, and that some of the world's greatest adventures can be had from plain, useful work.

Up and Going

Condensed from Collier's, The National Weekly (March 23, '29)

W. B. Courtney

ONE day last summer a lard salesman in Albany, N.Y., was notified that the market price had just slumped. The salesman for a competing firm, unaware of this sudden price decline, had started for Boston on an express train half an hour before, to see the territory's most important customer.

The first salesman hired a plane, flew to Boston, sold seven carloads of lard to two wholesalers there, stopped at Springfield, Mass., on the homeward trip and sold three more carloads — and *was back in Albany before his rival on the train had reached Boston.*

Next summer it won't be necessary for a man in a hurry to charter a special plane. He will be able to travel by regular air service to all principal cities, or be set down within easy reach of smaller communities not on the schedules. The astonishing truth is that the United States is blazing into the skies with established and projected passenger services that in a single uprush will give it world supremacy. While our heads have been tilted to record flights by glamorous Americans, other and quieter men have been engraving a new map at lesser altitudes. This new map will fetch San Francisco closer to New York than Hartford was to Boston in the Thirteen Colonies; Montreal as close to Times Square as Harlem was to Stuyvesant's Bowery.

Three transcontinental lines will form the backbone of the nation-wide passenger service:

1. National Air Transport — Boeing Air Transport: An all-air route following the present air mailway, and approximating its time of 30 hours. The NAT will shuttle between New York and Chicago, using 12-passenger 1275-horsepower tri-motored Ford planes. BAT will fly the Western division, using its own 12-passenger ships.

2. Western Air Express — Robertson-Universal Air Lines System: an all-air route, offering, however, opportunities for train connections. WAE, using 12-passenger Fokker tri-motors, will have its eastern terminal at Kansas City; Robertson-Universal will use 32-passenger quadruple-motored Fokkers, with sleeping accommodations for 16, on the New York line.

3. Transcontinental Air Trans-

port: an air-rail route, using Pennsylvania railroad between New York, Philadelphia, Washington, and Columbus, where transfer is effected to or from 12-passenger Ford tri-motors.

Spun from these core routes to the four corners of the country will be a web of lines operated by 25 companies, providing scheduled stops in more than 110 cities, flying a total daily mileage of nearly 40,000. These are the official figures of the American Air Transport Association. A nation-wide chain of air-taxies is also to be flown by Curtiss.

But is the American public air-minded enough at present to support this elaborate service, and to justify the millions of dollars being laid out in equipment?

"I believe it is," said William P. MacCracken, the brilliant young Assistant Secretary of Commerce for Aëronautics, to me recently. "The growth of passenger traffic will be limited only by two things; first, the safety of the services; second, the speed with which fares are reduced."

I asked the Operations Chief of a big company about the fare situation. He said:

"Tri-motored ships cost up to $85,000. Our new tri-motors will cost about $125 an hour to run — that includes all overhead. With any kind of traffic, we'll make a nice profit at ten cents a mile. And when some of the big boys get into competition — mark my words, fares will fall fast.

"The railroad fare from coast to coast, figuring meals and extra fares and the like, comes close to $200. The all-air fare will be around $300, with free meals aboard ship."

However, there's something more important than cost — safety. On this single factor, more than on all others combined, rests the decision whether air travel will soon become a national habit. I mentioned this to the chief.

"If we can have six months free from bad crashes, I believe we'll have people on the way to being plane-minded as they are now train-minded and ship-minded. When the *Vestris* survivors got back to port, most of them shipped at once on other boats. Yet these people shudder at the thought of an air accident.

"All flying men are bitter about the inclination of newspapers to sensationalize aviation accidents. If a mail pilot, caught in a blizzard, cracks up in Walla Walla it is front page stuff in New York. If a motorist gets himself and his wife and their seven children scrambled under a train in Walla Walla, the news never crosses the Mississippi. Automobiles kill more than 30,000 a year in this country; but

the best that licensed pilots and planes could do in the first six months of last year was six.

"Lufthansa's records show that an air traveler's chances of reaching his destination safely are 99.997 percent. The Imperial Airways haven't killed a passenger since 1924 — or in close to 20,000,000 miles of flying. In this country Western Air Express has flown 2,000,000 miles without a serious accident. In fact we could overwhelm the public with statistics, but what's the use? People want some tangible representation of safety. And I think they've got it — in the radio.

"Radio is going to have three mighty important functions. First, as a reliable automatic guide — radio directional beacon, you know. Second, for the dissemination of weather bulletins and other safety information. Third, allowing passengers to talk to their offices and homes."

The Department of Commerce, in conjunction with special committees, is engaged in drawing up a standard system of nation-wide radio stations, to be used by all air lines. Meanwhile, the big passenger operators are organizing their own systems, pending a federal standard. TAT, through its affiliations with railroads, is planning to have regular railroad station agents trained and supplied with meteorological equipment ($1000 worth for each agent) sending in regular observations to expert meteorologists in various key towns. This information will supplement that received from the regular Federal and state weather reports. This system will make the meteorologists, who will be in constant radio communication with every ship aloft, responsible for decisions that formerly were left to the pilot's judgment.

A pilot might say in his transmitter: "Fog ahead; what shall I do?"

The reply comes: "Go through. It extends only three miles."

Or a pilot might say: "Weather looks sweet, not a cloud" — and be told peremptorily: "Turn back and land. There's a twister coming up from Oklahoma and headed right across your path."

Fog is one of the airplane's greatest enemies. The government, and many private companies, are conducting all kinds of fog experiments. Neon lights, buried under iron grilles on landing fields will be visible for miles through fog. Radio beacons will draw a pilot in a bee line for his field, while a new kind of altimeter tells him exactly how high he is above the ground, not above sea level, every instant. Before long, it is promised, we'll be flying and landing with perfect safety, fog or no fog.

Scotty Allen on Training Dogs

Condensed from Good Housekeeping (March, '29)

Scotty Allen

I BRING my dogs up just about the way I have brought up my children. I am friendly, appreciative, playful, and kind — you can't be too kind — and I am firm all the time. You have to demand obedience if you are going to get anywhere with a dog — or a child.

One of the first things I teach a dog after I have taught him obedience is good manners. A well-brought-up dog *knows his place*. He doesn't jump up on his master and ruin his clothes with dirty paws; he doesn't beg for food when folks are eating; he doesn't go dashing nervously about when there is no excitement; he doesn't plank himself down in the best chairs, or in inconvenient places where people will fall over him.

His behavior toward persons coming to the house is well defined. A person who has been there before he will meet and escort to the door. A respectable person, yet a stranger, he will recognize; he will not bark at such persons, but permit them to go to the door, watching them closely nevertheless. He will meet a suspicious-looking person — for instance, a tramp — with a few short barks to warn the master that such a person is near, and then stand near the door and by growls forbid the stranger to enter.

The most detestable are barking dogs, and dogs that chase everybody and everything that comes along. There are too many of them these days, and all for the want of a little education.

After a dog has learned good manners and obedience, he should learn a few tricks. This is good for his character. I do not mean elaborate circus tricks, but those pleasant little parlor tricks such as opening and shutting the door, fetching articles, and so forth. A good dog is happiest when he can do something that gratifies his master.

In teaching a dog tricks I usually start with some sort of retrieving. All dogs have a remnant of the retrieving instinct in them. Not long ago I took a ten-month old dog called Mike, whom I was bringing up as a house pet, into the yard. "Now, Mike," I told him, "this is your first day of school." He wagged his tail.

I took a small piece of garden hose and threw it across the yard. A ball or a stick would have done just as well.

Like most dogs, Mike ran after it, seized it, and began to worry it around.

"Bring it here, Mike," I called.

He looked up, then began to worry it again.

"Bring it here, Mike," I repeated.

He cocked an ear, left the hose, and came trotting to me.

I went back to the hose with him and made him pick it up and give it to me. Then I threw it again.

It took a good many trials before Mike knew that I wanted him to bring it all the way back to me, but finally he did it. I praised him, and patted him, and gave him a small piece of meat. Then I had him do the trick several times more to make sure he'd remember.

From that day on I never threw anything for Mike without making him bring it all the way back to me.

Two days later I taught Mike to close a half-open door by holding the hose against it and saying "*Shut the door.*" He stood up on his hind legs, bracing himself against the door with his front legs, and grabbed at the hose. Of course, his weight closed the door. I made him do it again and again, and each time I held the hose against the door I commanded: "*Shut the door, Mike.*" It is well to use as few words as possible, and to make them short, so the dog can associate them with the action.

About the fifth or sixth time I didn't hold the hose against the door. But I said, "Shut the door, Mike," and made a move with the hand which had held the hose. Instantly he hopped up and closed the door. By suppertime, that day, Mike would shut the door whenever I told him to do so.

A few days later I taught him to bring my slippers. I started by sitting down and tossing my slipper across the room. Mike retrieved it just as he was taught to do. I repeated this several times, saying distinctly each time, "Get my slipper, Mike."

Then I stopped. I put the slipper across the room, picked up my paper, and began to read. Mike stood uncertain, wondering if this was the end of the game.

Suddenly I looked up and said, "Get my slipper, Mike," and I made a small gesture toward the slipper. Sure enough, he went and got it, and I made it clear that he had pleased me. After about 15 minutes, when he had had a chance to get his mind off the subject, I put the slipper across the room and said, "Get my slipper, Mike." He didn't respond, even when I made a gesture. So I had to start all over with the retrieving act.

As time went on, I taught Mike a lot of simple tricks. He would bring in wood from the woodpile and put it in the wood-

box; get various articles out of a closet and close the door after him; open and shut the door; and so on.

He got just as much fun out of all this as I did. I never used a whip on him. In fact, I don't use a whip on my teams. I carry a whip just as a policeman carries a club, as a badge of authority. If a fight starts, or a strange dog comes up and wants to fight, a whip is handy to head off trouble. It is much more effective if the dogs are not used to it.

Another thing, I don't spoil a dog by trying to hurry him. I stop while the dog wants to play some more. And I make sure he is perfect in every little detail of one trick before I take him on to the next.

I have said how important it is to show your appreciation. But this is not enough. Show some zest, too; let the dog know you enjoy working out the tricks with him. He will feel your enthusiasm and be twice as happy in pleasing you. Dogs are extremely sensitive.

One of the finest dogs I ever owned came to me in Scotland when I was a boy there, 50 years ago, herding sheep. This animal had belonged to Angus, an old Highland Scot.

For three years the dog had won first prize at the annual sheep-dog tournament. One year, during a practise test, Angus thought the dog made a mistake. When the performance was over, he took his shepherd's crook and beat the poor dog unmercifully. Of course, by that time, the dog did not connect the beating with whatever it was that had gone wrong. As a result his spirit was broken, he no longer trusted his master, and won no more tests. Poor old Angus was heartbroken; he realized that the dog was spoiled forever, all due to his hasty temper. As he could not bear to have the dog to remind him of his lack of self-control, he gave him to me.

The greatest thing to remember about a dog is that he is much wiser than people give him credit for being. I think he is much like an Indian with a stranger. Though the Indian may understand well enough, he often grunts to a stranger, "Me no sabe."

Unless you have and can keep the confidence of your dog, he is like the Indian, "No sabe." On the other hand, if you are pals, he will be so anxious to please you that he will even teach himself.

I Am Fifty—and It Doesn't Hurt!

Condensed from The American Magazine (April, '29)

Dorothy Canfield

DO you remember the little girl who asked if it didn't feel queer for a few days after you grew up? I think of her when people ask me how I feel about being middle-aged. The answer is, "You don't feel anything sensational. You just go on living."

Of course I realize that I am no exception to the laws which make all women around 50 very different from what they were at 20. To take, first, the most obvious change, and one that has always provided a theme for melancholy poems — the inexorable passing of the smooth-skinned, bright-haired radiance of youth. Why have I been so little troubled by this change?

The war taught me a lesson on that point. I spent much time in France, in contact with the direst needs. We, who were doing what we could to help, desperately needed reinforcements. To be of any use, our reinforcements must be capable of endurance, perseverance, self-forgetfulness. We came to distrust bright eyes and gleaming young hair. In our minds these pretty signs of physical youth became associated with childishness, fickleness, lack of conscience. We could not always provide the "something exciting" without which they would not stick at a long, tiresome job till it was done. Would not? Apparently they could not. For dependability is a quality almost impossible to youth, but natural to the middle-aged tastes.

Remembering the heartfelt liking we had in our war work for the plain, middle-aged faces of the women who could be counted on to stick it out, no matter what came, I do not, now that I am a plain, middle-aged woman, feel desolately that the world has no more welcome for me.

A young poet would, of course, be horrified at my resigned satisfaction. But bring to mind the fact that 99.5 percent of good lyric poetry, always has been written by young people who are brilliantly improvising on a subject they know nothing about.

Being middle-aged is a nice change from being young. Honestly, I mean it. One of the traits of human nature about which there is unanimity of opinion is its love for change. When I was a young lady — that is what we were 30 years ago — I was anything but superior to the pleasures

of young ladyhood. I "adored" opening the long pasteboard box which meant a bouquet from an admirer. I loved maple-nut sundaes to distraction, and there never was a girl, I am sure, who more heartily delighted in West Point hops. But suppose that by some miracle I should now look young again, and should be invited to dance once a week for the rest of this session at West Point, as I used to do. I'd rush into it as enthusiastically as I should carry out a sentence to play tag for an hour a day.

I still quite naturally enjoy playing tennis, riding horseback, skating, and mountain climbing. It is true I don't engage in these sports as ferociously as I did at 20, and for a good reason. I don't need to, or care to. At 20 I was like nearly everybody else of that age, frightfully uncertain — half of the time at least — of deserving to be in the world at all, and frightfully anxious to prove my worth to myself in the only way youth knows — by beating somebody else at something.

Here is one of the pleasures of middle age of which nobody breathes a word to you beforehand: the deliciousness of outgrowing that neuralgia of youthful pain at being surpassed in anything! This change is not due to greater magnanimity — rather to the fact that moderately successful, healthy-minded older people have found an excuse for existence in some job that the world seems to want done, which, after a fashion, they seem competent to do.

My gentle old uncle, when the cat had settled down to sleep in his favorite soft chair, used always to leave her there and sit upon a hard chair till she woke up and went away. When we remonstrated with him, he answered, "A cat has so few pleasures compared with those open to me." I have something of the same feeling about the boy who beats me in a race on the ice. He does *so* enjoy beating somebody. And there is so much else that I can enjoy of which he doesn't dream. For one thing, I can consciously, disinterestedly, relish the physical delights of the exercise, the miraculous knife-edge poise, the gliding speed, the tingling air, the beauties of the frosty trees. I enjoy these things far more than he does, or than I did at his age, freed as I am now from his single reason for being on the ice: either beating, or learning to beat, somebody else.

Understand me, I do not make the claim that I enjoy my corner of the pond *more* than that magnificent, long-legged kid out there, racing from one end of the hockey field to the other in eagle-like swoops. He is enjoying a wild, physical intoxication which gets considerably dimmed by

the years. But as far as that goes, his physical intoxication is not so wild as that of a group of quite little children who, with faces of pure joy, are merely scuffling along on a slide at one end of the pond. The point is that we are all, in different ways suitable to our ages, having a glorious time, and that the young couple who swing dreamily around and around, hands clasped, are not the only ones to enjoy the ice.

I use skating, of course, as a convenient symbol for the way life is taken at different ages. Now, you will note that of all those age-groups on the ice, I, being the oldest, am the only one who has any notion that *everybody* is having a good time. Although the 14-year-old kid may be amused by "the kids without even any skates," he is not sorry for them, because he remembers that ages ago he used to enjoy sliding. But it is real pity he feels for the poor fish who's got tied up with a girl and has to steer her around. And probably his pity is even greater for the gray-haired woman who seems to think that cutting circles is skating. The young couple know, of course, that the hockey-playing boys who have not yet found their mates are having some sort of childish good time, but they are convinced that it must be awful to be so old as to have gray hair, with your first love far behind you.

The trouble, you see, is that they don't trust the future. Young people seldom do. They are afraid to. They are so impressed with the present that what they can't get now this instant seems lost forever.

Is it true, as people say, that youth is naturally happier than age because the one lives on hopes, the other on memories, and that while you can change hopes to suit yourself, memories persist in staying more or less the way they actually happened? Stuff and nonsense! Hope's always left, no matter what afflictions have come out of Pandora's box. It's not a question of an age limit. From cradle to grave the favorite slogan of every mother's son and daughter is always: "I know I used to be a dub, but I've learned my mistakes. Hereafter everything I tackle is going to go over big."

The fear of approaching old age? Having arrived at an age which seemed to me at 20 as forlorn as 80 does to me now, and perceiving that a change of tastes and desire has gone along with a change in age, I cannot help guessing that if I continue to yield myself naturally to the rhythm of the years, I shall find the inner time-table making as close and accurate connection for me then as now.

Learning How to Be Black

Condensed from The American Mercury (April, '29)

Albon L. Holsey

EVERY Negro child must eventually awake to that consciousness of color which white America has decreed for it. Whether it be born in New England or in Georgia, the curse of caste overtakes it with the same relentless and cruel certainty.

The artifices of Negro parents to stay the day of color consciousness for their children show a heroism whose futility makes for real dramas in American life. Inevitably, the day arrives when the Negro child discovers that it is a Negro and shoulders its burden of inferiority. Dr. W. E. Burghardt DuBois was born in New England; Dr. R. R. Moton was born in the upper South. Yet each had his awakening at about the same age. Dr. DuBois in *The Souls of Black Folk* says:

"I remember well when the shadow swept across me. I was a little thing, away up in the hills of New England. . . . In a wee wooden schoolhouse, something put it into the boys' and girls' heads to buy gorgeous visiting cards — ten cents a package — and exchange. The exchange was merry, till one girl, a tall newcomer, refused my card. . . . Then it dawned upon me with a certain suddenness that I was different from the others."

In *Finding a Way Out*, the autobiography of Dr. Moton, he tells his story thus:

"My father went to live with a family of Mortons, who had a son, Ernest. Our friendship grew; indeed, Ernest left everything else to be with my colored chum Lee and with me, and we, in the same spirit, neglected everything that we could with impunity, in order that the three of us could be together. As we grew older my father did not wholly approve of this intimacy, and used often to say that we were 'too thick to thrive.' In the course of time Ernest went off to school, and the weeks immediately following were dull and dreary for us at home. . . . I was anxiously awaiting the Christmas holidays when our friend Ernest would return and we would again have some good times together. . . . At last the day came . . . Lee and I, as soon as Ernest alighted from the carriage, rushed up to shake hands. He not only did not shake hands with us, but his manner was as cold as the north wind that we were breathing . . . I went into the kitchen with Aunt

Viny, the cook. I was feeling bad; so was Lee. Sometimes I wonder if I ever thought quite as seriously on life as I did that night."

My own awakening came early. Born and reared in a small town in Georgia, I played quite naturally with the boys in my neighborhood, white and colored. But I had not yet observed the fact that the white children always came to play with *us*. They came into our front yard and back yard and even into our house with perfect freedom, but if we played in their yards at all it was in the back yard, and we never entered their homes beyond the kitchen. On one occasion, however, I remember being permitted to peep into the living room of one of the "ristercratic" homes; and the feeling of awe which swept over me as I walked on the thickly woven carpet and gazed in astonishment at the heavy crystal chandeliers and other affluent furnishings is a memory of grandeur whose impression vividly remains.

On Sundays I went to Sunday-school, wearing a white jacket with lace collar which was immaculately white and uncomfortably stiff with starch. Sometimes, when my mother gave the last yank at my hat to get it in the proper position on my head, she would admonish me to be a good boy because "you look as nice as any white boy in town." No peacock ever strutted with more self-satisfaction than I did after that compliment.

But this pride was to be rudely smitten. A crowd of our boys, white and colored, were playing one day near the home of one of the white boys whose parents were of the middle class. This particular boy accidentally cut his foot on a piece of glass and began crying. His mother, coming out the door, said: "That's what you get for playing with them niggers. I told you to quit playing with 'em, didn't I?" We never played with that boy again. The word nigger and the contempt with which that white woman uttered it gave the term a new and dreadful meaning. Confused and resentful, I went straight to my mother and asked her to explain it, and also to tell me why the white boy's mother did not wish him to play with us. She tried to explain, and as she did she wept.

At 15, I was fully conscious of the racial difference, and while I was sullen and resentful in my soul, I was beaten and knew it. I knew that the front doors of white homes in my town were not for me to enter, except as a servant; I knew that I could only sit in the peanut gallery at our theater and could only ride on the back seat of the electric car and in the Jim Crow car on the train. I had bumped into the color line and knew that so far as white

people were concerned, I was just another nigger.

While the soul of the black boy is being thus scourged with the curse of caste, the white boy is getting a false evaluation of his color which tends to implant the seed of unexplained hate, and take all reality out of human brotherhood.

One day, on an errand, I passed the home of a young white man, who was playing with his first born, a boy, on his front porch. As I passed, he held the baby on his lap and pointing toward me said: "Look — nigger. Say 'nigger'." As long as I could hear him this father was repeating to that baby the word nigger.

I saw this baby grow into young manhood. One day when he was perhaps 17 years old, I saw him with a crowd of other boys tussling on the street. Accidentally, he bumped against a passerby. The passerby was an elderly colored man. Without looking around the white boy said, "Oh, excuse me, please." Then, he turned and saw that the person he struck was a Negro. "Oh, it's a nigger. You go to Hell!"

But in the midst of all these depressing experiences there were helpful incidents to which my memory clings. The late Bishop H. M. Turner, of the A. M. E. Church, presided at a conference when I was in my teens. The pastor of our church announced as the next hymn, "Wash me and I shall be whiter than snow." Bishop Turner was on his feet in an instant, halting the organist.

"That's the trouble with you colored folks now. You just want to be white. Quit singing that song and quit trying to be white. The time has come when we must be proud that we are black — proud of our race." For nearly an hour he spoke on like that, with an appeal that stirred his audience to a high pitch.

In the South, the black traveler who desires Pullman reservations seldom applies directly to the ticket-agent. He finds a local colored man who in turn can get some white friend of his to "straighten it out" so he may secure his ticket. The Negro motorist who has an accident follows the same plan.

Scattered throughout the South is a small group of white people who are willing to "straighten things out" in their communities for the colored people. A few white and colored leaders called this group together and organized the Commission on Interracial Coöperation. A ten-year record of the accomplishments of the Commission shows among other things a downward trend in lynching, better schools, and here and there a changing attitude in the courts towards Negro prisoners.

(Continued on page 63)

Speed—the New Vice

Condensed from Vanity Fair (April, '29)

Paul Morand

SPEED results from following the line of least resistance. We do boring and disagreeable things as quickly as possible; that is why machines were invented. But since then, instead of enjoying the leisure thus achieved, we have devoted it to doing more work, to superfluous production.

That is one of the consequences of that all too human law of which Gobineau speaks, "which causes us always to waste with one hand what we have gained with the other." To what do the means of communication which envelop the world in a network of roads, railways and telegraph wires, lead, except, in the final analysis, to the machine — to speed?

I wrote, some years ago, that the universe had become for us nothing but a field of experience constantly growing smaller. Read the travel books of today. Men no longer make voyages, but only flights. In M. Claude Blanchard's vivid account, *An Airplane Flight Across Europe*, for example, the countries, the people, the customs come hectically before our eyes. "This morning I skimmed over Little Russia and now the footlights of the stage illumine a new scene . . . here is Czecho-Slovakia!"

We are all children, and the novelty of this game dazzles us. Will that last? No; we grow accustomed to these marvels, and like drug addicts, require ever-increasing doses.

When we start out in a new car we think: "When the speedometer once registers 75 miles an hour I shall be satisfied." But on the return trip, after we have attained that magic figure a score of times, we are not happy; that dreamed of maximum, once attained, becomes part of a monotonous routine.

A portion of the lure of speed is that noble ambition to excel which has placed the Aryan race above the rest, but there is also a terrible excitement about speed which is beginning to intoxicate humanity. Observe the congestion in our cities, the desertion of the countryside. People can no longer bear either solitude or remaining in one place. Remaining in one place produces in us, if I dare say so, a fever for which speed is the remedy.

While our doctors seek to prolong life, we seek to broaden it by

trying to make it hold more and more for us; to live quickly is to cheat fate, it is to live several times in a life time.

"Do you remember the holidays of the old days?" a woman friend once wrote me. "Those ceremonial departures for the country, with great bales of linen and chests of silver, and servants sent ahead? Nowadays, thanks to my little car, I have a month at the seashore, a month at *Ile-de-France*, a month on the Riviera, another in Italy — four vacations instead of one."

Yes, so far as actual time goes, we live four times more than we did a century ago. But do we not live four times less well; has there not been, perhaps, just such a depreciation in our enjoyment of life as in continental currency?

It took the old school European rulers a long time before they admitted they could ride in a motor car without loss of dignity. The old Emperor Francis-Joseph of Austria, for instance, never rode in a motor, never wrote a letter on a typewriter, never used a telephone. When monarchs make a triumphant entry into a town they still ride in a carriage drawn by four horses, and a motorized funeral procession is still a rare sight in Europe. Didn't Ruskin cross England in a mail-coach, by way of protest against what he regarded as the absurdity of the tramway? And is there not, even in our day, a company that plans to organize coach tours through France so that people may really see the country?

Certainly the speed with which we make our contacts with everything is harmful to the intensity of our perceptions. Speed kills color; the gyroscope, turning its fastest, reveals only gray.

How speed has revolutionized our customs! It is simple to read in the newspaper that the Atlantic has been crossed in 24 hours, but that brutal statement of facts does not allow us to perceive the more gradual evolution of our point of view, under the domination of "the only new vice." Is it not through sheer haste that we have cast aside, one after another, the leisurely implements of old — horses, the sail, good cooking, good manners?

Our universe, built upon deep foundations, has been delivered into the hands of impetuous mechanics. Nature, when she works well, works slowly; she needs only a day to produce larva, but twenty years to form a man. We no longer understand that. We are no longer sensitive to the beauty of germination, of hatching, except in the cinema, where these processes are miraculously accelerated. It is the cinema, too, which, showing us pre-war films, gives us a measure of the gap between yesterday and today. Those grotesque clothes,

those stilted gestures, send us into shouts of laughter.

Even love, "eternally the same," has changed. Modern lovers no longer write letters; they telephone or telegraph to save time; they scarcely speak. That is why love scenes in the theater nowadays seem to us so verbose and artificial. In England, in America, people make love in motor cars. Friendships are swiftly formed. We no longer have time for anything, even for a revolution, which is called, nowadays, a "putsch" and seems to last only a few hours, like a tornado.

Art itself is modified by speed. Our better painters turn out three pictures a day. Style in writing has become telegraphic. Here is a description of a contemporary aesthete:

"His scanty patience made him extremely nervous and harsh in his judgment of all works which required more than five minutes to perform. 'We are too pressed for time,' he told me. 'Nothing endures any more. How can you expect anyone to sit through a four-act play, an opera, a Beethoven symphony?'"

Let us not forget that speed is enervating; the neurologists tell us repeatedly. We no longer have a sense of proportion; we no longer distinguish between going fast and going as fast as possible; the record is everything.

Do I then condemn speed? Not absolutely! I seek to measure myself beside it, to tame it. I once heard Cocteau, during a performance of *Don Giovanni*, say of Mozart's characters: "They move very fast, but, if they wished, they could move slowly." Let us be like them. One must be swift, but one must have within one's self a sense of balance.

Let us love speed, the modern miracle, but let us always be sure that we hold the check rein.

Learning How to Be Black

(Continued from page 60)

Meanwhile, the most influential colored man in the typical Southern community is that one who can get white people to "straighten out" things for him or for his people. Herein lie both the tragedy and the problem of the Negro. A white man of influence has prestige of his own, but a Negro's influence is measured in terms of his white contacts. So we find Negroes still faced with the necessity of cultivating white folks in order to get by. This eternal struggle to survive collects its deadly toll of the manhood of the race, for only too often it involves tattling, scheming, selfishness, slanderous whispers, and the blood-bought betrayal of other Negroes.

Blazing New Trails in Education

Condensed from Children, The Parents' Magazine (April, '29)

Maria Montessori, Author of "The Montessori Method"

EDUCATORS worthy of the name have always recognized the marvelous potential energies of the child. Unfortunately, the application of these potentialities to education has been hindered by two powerful obstacles.

The first and most formidable includes the direct influence of adults on children. From the child's point of view, the adult, with his stronger intellect and will, must be regarded in the long run as an opponent to growth. Writers, teachers, and all persons who deliberately try to "educate" and "guide" are the greatest obstacles with which the child has to contend.

The second obstacle is the material environment which so seldom corresponds to the child's essential needs. He must constantly adapt himself to the environment made for adults. Even the special *milieu* of childhood — the school — is by no means so constructed as to enable the child to act creatively and happily. Rather does it tend to enforce upon him passivity and apathy, whereas his natural expression is activity and mobility.

An insect, picked up by a human hand, shams "dead" and masks the natural manifestation of its activity. By analogy, something similar happens in the psyche of the child, when teachers try to investigate its mysteries by external force and external stimulation. Anyone who would study a child's psychic processes must, as it were, stand aside and not let the child notice his presence; he must abdicate the permanent supervision which represses and oppresses the child. He must observe the child with the humility of true reverence, refusing to assert his personality.

The child's special *milieu* must be really adapted to childish needs. Like ourselves, children need furniture and utensils which are proportionate to their size and strength, and by which they are not dwarfed. Therefore we adults, who wish to undertake the education of children, have two primary obligations. First, to provide a suitable environment for children, and to permit them to live in that environment according to their spontaneous creative impulses. Second, to learn the difficult art of meeting with sympathy the natural reactions of children to such environment. The child

must be able to move freely in this little world of his own, and to permit this, the educator must remain passive.

Our generation grew up in the belief that children acquired knowledge only when spurred on by a teacher; but when we placed them in appropriate surroundings we found that they became far more eager in work and more efficient in its performance than they had ever been in the conventional curricula of schools. In the nursery schools of today children display an astonishing precocity, a range and grade of faculty unheard of before. The old dogma that discipline and industry were dependent upon teachers is also exploded. We now find that children in our nursery schools are capable of effective self-discipline. The secret of conducting a nursery school wisely is to give the children's activities a chance to unfold, untroubled by adult intervention. Thus the teacher's craft is no longer to impart knowledge but to guard the child's delicate flame of normal vitality.

It has been repeated *ad nauseam* that the adult, in dealing with a child, should become a child; but this is one of those platitudes which have no sense when we seek to translate them into realities. Adult and child are such different beings that between them a great gulf is fixed, which we cannot bridge. We should rather direct our efforts to making children and adults as mutually independent as possible. Not that the child should be removed from the physical presence of adults, or from adult affection. But there must be a change of attitude on the part of adults, founded on the recognition of the independent rights and different needs of childhood. This is the only way of restoring harmony between the generations who exist in order to love one another, but must progress independently of one another.

In order to reach true maturity, the child must pass through childhood according to the laws of his own nature and needs; there is no other way to really "grow up." Formerly we believed — or acted as if we believed — that a child "grew up" through and by imitating adults. So the adult endeavored to set an example to the child, to compel the child, by superior mental and physical power, to adopt adult ways and conform to adult requirements. The characteristic feature of the old education was the adult solicitude that said to the child, "Strive to resemble me, for you exist in order to become like me." On the other hand, the new concept of education is founded on the belief that normal adults can develop only out of such children as have developed ac-

cording to their nature as children, and in the conditions favorable to that nature; even if the child stage of evolution appears totally incompatible with the subsequent stages which arise out of it. Nature prepares for full maturity through various successive stages.

For instance: a little child is born without teeth. What does it do to make its teeth grow? It sucks and sucks, as though it could never grow teeth. Yet as it sucks vigorously, and is fed proper food, it will grow strong teeth; and in no other way. If we were to imitate our methods of intellectual training, we should display our own teeth to the baby, and try to teach it to chew with its helpless gums.

We know now that we have duties to the bodies of our children which were formerly unknown, duties arising from our knowledge of the principle of physical evolution, that the body of the child grows and molds itself in obedience to its inherent forces, and not through adult attempts to shape it. Formerly, mothers arduously wrapped their babies in swaddling clothes to make their legs straight; they cut through the flesh that "tied" their tongues so that they should learn to speak; they put tight little caps on their heads to prevent their ears from sticking out; they turned the child over from side to side, lest the skull bones be malformed, and stroked and pulled the babies' flat button noses so that their profiles might be fine and regular! And at the same time, the adult world remained inactive in the face of the enormous death rate among young babies, and the many illnesses which slaughtered thousands of children, and were largely attributable to wrong treatment. Hygiene nowadays has proved beyond a doubt that the little noses grow shapely, the ears nestle to the head, the legs grow straight and strong through Nature's own laws, and that interference here is not only useless but harmful. But the child does require the strictest cleanliness, good food, rest, pure air, and the greatest possible movement.

As with their bodies, so with their minds. We must accept the fact that we cannot mold the child's character, brain, or emotional instincts; they develop as part of the processes of Nature. But we must do all that is in our power for the child. We must provide an environment that enables all latent faculties to develop fully; we must reverence the child's mind and soul, which move mysteriously in accordance with the highest purposes of creation. The proper care of children's souls is the key to a better humanity.

Mysteries of Modern Hypnotism

Condensed from The North American Review (April, '29)

G. H. Estabrooks

HYPNOTISM is no longer a plaything of the showman or a dimly understood power which rests in the eyes of a few skilled operators. Science has now placed hypnotism on a firm foundation of experiment.

When an individual is hypnotized it simply means that his unconscious mind has taken over charge of his body. Also, this unconscious mind is now under the control of the hypnotist or operator. Let us illustrate: Cases of people who walk and talk in their sleep are rather rare, but everyone knows they do exist. There you have an example of the unconscious mind controlling the body, for the individual has no remembrance of his actions on waking. In some of these cases you can talk to the sleeper and he will answer you. You can give him simple orders — suggestions — and he will carry them out. In such a case the subject is as much hypnotized as though an expert had done the trick.

By a very simple technique — usually that employed by the famous Nancy School — the hypnotist can put the individual into this condition. He has only done artificially what nature does in everyday life. Anyone can learn to hypnotize. It has nothing to do with "will power."

Actually there are a great many stages in hypnotism. In the early stages the subject may be unable to open his eyes, or in deeper stages he may be made to produce "automatic movements" such as opening and shutting his mouth till told to stop; but, generally speaking, in these early stages the subject will remain conscious of what is happening. Only in the final stage do we get amnesia or loss of consciousness.

The reader must bear clearly in mind that the phenomena which I shall describe apply only to this deepest stage of hypnotism — somnambulism, it is called — and that only about one-fifth of the human race can be influenced to this depth. The remaining four-fifths will never go deeper than some of the preceding stages.

Perhaps the most striking characteristic of hypnotism is the subject's great suggestibility. He tends to believe anything that is told him. For instance, if I say to a somnambulist — who is quite unconscious and appears to be in much the same condition as a sleepwalker — that there is a

rattlesnake on the table, he will recoil in terror. If I give him soap and tell him it is fudge, he will eat it with great gusto, while if I tell him that his arm is numb and senseless as wood, I can thrust a needle into it without causing him the least pain. Any of the five senses can thus be deceived in the deepest stages of hypnotism.

Rapport is another peculiar result of hypnotism. Thus, after I have hypnotized a subject, he will listen to my voice alone. You may shout yourself hoarse and not get the slightest response. Perhaps the strangest of all the phenomena are the suggestions which are carried out after the subject is awake. For instance, I may say to a subject, "At five o'clock tomorrow afternoon your right arm will suddenly become paralyzed." The subject will remember nothing on awakening, but whatever he may be doing at five o'clock, his arm will become useless.

This picture of hypnotism represents the opinion of many eminent authorities. Perhaps the most able work done recently is that by Dr. P. C. Young, in the Harvard Psychological Laboratory. His results agree with those of older authorities in that he finds, in the deep stages of hypnotism, that the subject is open to all sorts of hallucinations, that he can produce paralyses of the various types and can cause loss of sensation in any part of the body. He finds the condition of being in rapport. He also gets amnesia or loss of memory on awakening and can produce all types of post-hypnotic suggestions.

He further finds that the person under hypnotism is capable of great muscular endurance; and that there is a remarkable increase in the memory for past events. Thus a subject could recall events in early childhood which had long since been forgotten by his conscious mind.

Perhaps the most interesting use of hypnotism now is in the field of medicine. Many nervous diseases seem to result from so-called complexes. These are the memories of experiences which have a very unpleasant emotional tone. For certain reasons, these memories are completely driven out of consciousness — are "forgotten" — and are locked into the unconscious. Many such cases occurred in the war under the name of "shell shock." In a good many instances, where a gap occurred in a man's memory as a result of a shell exploding near him, his forgotten memories were discovered through hypnotism. Strange to say, when these forgotten memories were returned to consciousness, the patient generally recovered normal health.

An interesting revival in the practise of hypnosis since the war

has been its use in child-birth, which seems to have become more or less accepted procedure at the Heidelberg clinic in Germany.

"But," it may be asked, "why not use hypnotism in place of chloroform or ether generally, since we can get anaesthesia merely by suggestion?" There are two main reasons. In the first place, only one-fifth of the human race can be thrown into the deepest stage of hypnotism. Here only are we sure of getting immunity to pain. Secondly, even then results are not certain. I have had patients suddenly wake up out of deep hypnotism for no apparent reason. This is rather a common experience with all experimenters, and would be disastrous in the middle of an operation.

Two other problems are always of great interest to the general public. First, "Can an individual be hypnotized against his will?" That depends on a number of factors. First, we have the case of the sleep-walker. People of his sort can certainly be hypnotized without their consent. Then there is always the fact that after an individual has been hypnotized once, it is far easier to repeat the performance. Yet most authorities, including Dr. Young and the old master Bernheim, hold that a subject cannot be hypnotized the *first time* against his or her will.

Just what power has the hypnotist over the subject? An interesting point, but one which can never be answered, because the only way to find out if I can make a subject commit a murder, for instance, is to have him do so.

The unconscious mind is much alive to certain issues. Thus I can have my subject commit murder with a rubber dagger, or put imaginary poison in his victim's tea. He — or rather his unconscious mind — realizes that the whole thing is just a little farce and he is willing to play his part. On the other hand, make any suggestions which run counter to his real ideals and you have a very different picture. Your subject either flatly refuses or wakes up. Dr. Young and Professor Foote at Louisiana State University showed this by asking the subject, before the séance, to write on a piece of paper just what he would not do. Strange to say, although the subject went into somnambulism it was absolutely impossible to force him to do those acts.

Hypnotism is a dangerous toy. Probably it is perfectly safe in the hands of a skilled operator, although such an authority as William Brown, Professor of Psychology at Oxford, would say it always has a bad effect on the subject. Certainly a bungling operator may cause all sorts of nervous disturbances in his subjects.

"Third Degree"

Condensed from The Outlook and Independent (April 3, '29)

Charles J. V. Murphy

IN the old days they called it the "third degree," but now it is known by what it really is — "police brutality." The process itself has not changed. Still they beat up prisoners in police stations to force from them confessions of crimes; still they hammer these defenseless wretches with rubber hoses and blackjacks to simplify detective work. And if you don't believe it, go into any police station in any large city and see for yourself: go into the back rooms and basement and, if you are observant, you will note the short, knoutish length of rubber tubing that is the clandestine — but very popular — weapon of a lawless justice. For the rubber hose leaves no marks when expertly used: it punishes horribly, yet it fails to raise bruises that might stultify the legality of the "voluntary confession." The most stubborn mind, in time, will "yes" a rubber hose, a detective's fist, deprivation of food, sleep, even the lavatory.

It is not my intention to weep over criminals; nor am I one of those sentimentalists who would have a detective look upon a gangster as a poor fellow whose glands are out of kilter. I've seen too many hard-boiled detectives and clever criminals to hope for that. But I do believe that the preservation of the Constitutional provision of personal liberty — the perpetuation of the traditional open-minded inquiry — is more important than the conviction of any one criminal; and an indiscriminate use of force by the police fails in the long run as a deterrent.

Consider the case of Luther Boddy. Boddy has since died in the electric chair. He was a negro bootblack. On the night of January 5, 1922, he shot to death two detectives as they led him to a police station for questioning in connection with the killing of a negro policeman. Literally on the doorstep of the station house, Boddy drew forth a gun he had concealed in the sleeve of his coat — a gun, incidentally, that he had "rented" for $2 a night — shot them both down and fled. Captured six days later in Philadelphia, he was returned to New York for trial. In his testimony, he said that when he saw the green lights of the station house, "everything suddenly went blurred. I reached for the

gun. I wasn't worried about anything except getting beaten up again."

It was a pitiful story of police oppression of which Luther Boddy told, and competent investigators verified it. Repeatedly he had been brought into this same station house, generally when he was neither under arrest nor charged with a crime, and pounded — slashed — with blackjacks and rubber hoses until his senses fled. The "shellacking," as it is generally termed, served, in his case, a dual purpose: if he had committed any one of a dozen unsolved crimes, his guilt presumably would be admitted; if he hadn't, well, the punishment would prevent him from contemplating another. His case is a good example of the cowardliness and ineffectuality of the "third degree."

Again, there were three boys, arraigned on charges of assault, who accused three detectives of having taken them to the station house, and of hammering them with blackjacks — even cruelly pressing the blade of a knife under their nails — until consciousness fled. So straightforward was their tale, so plain the horrible bruises on their bodies, that the Magistrate ignored their "voluntary" avowals of guilt and discharged them.

It was the misfortune of Joseph Kraus to be picked up on suspicion of robbery. Hale and hearty, he was arraigned before Magistrate Doyle, ordered held while the police gathered evidence, and returned to the station house. Kraus stands today acquitted of suspicion of the crime; but a sightless left eye testifies to the temporary skepticism of the police. And there is the pathetic case of an Italian store keeper, also merely suspected of a crime, who was so horribly beaten that his attorney ripped open his shirt when he was brought to court, disclosing lacerations of such repellent aspect that Magistrate Corrigan covered his eyes, and cried: "Take him away."

These are but a few incidents culled from hundreds. In the library of the New York "World" are ten fat envelopes containing reports on this sort of thing alone. And there are hundreds of cases more, known to police reporters, which never reached public print. For these reporters, whose livelihood depends upon cordial relations with the police, found it wise to close their eyes and say nothing, even when they saw suspects cold on the floor in squad rooms just under the Commissioner's office; even when a high-placed official — since removed — built up a reputation for "getting his man" by taking the poor wretches into the cellar of the station house and pressing their bodies — if the threat itself

didn't break them down — against the walls of the furnace.

The police proclaim that they are engaged in crime prevention, and are using the only methods that will work. When Commissioner Warren tried to break the habit in New York, the rank and file grumbled that his namby-pamby prohibitions were wrecking the morale of the force. When outsiders sought to interfere, as they have done from time to time, they have been courteously, but firmly, ushered out of Headquarters with the explanation that these prisoners "tried to escape," or — the most popular excuse nowadays, — "he fell down stairs."

"There is always a certain amount of indiscriminate clubbing of this sort going on," Magistrate Corrigan has said, "and it is invariably difficult to determine what is brutality and what has been done in the line of duty. The chances are that a hardened criminal will claim that the police gave him the 'third degree,' anyway. It is not easy to decide who is telling the truth."

Indeed, the "third degree" has stimulated a nice bit of skullduggery between the police and the lawyers, with the Magistrates at the bottom of the scrimmage. Having learned the sympathetic value of the plea, shrewder criminals conceived the idea of first confessing to avoid the pounding and then complaining in court that the confession was extorted.

Still other suspects, knowing that the police are after them, first go to a lawyer, have themselves carefully photographed, and then surrender. The lawyer hastens down to Headquarters the next morning and, if the "system" has been applied, sends out a hurry call for the photographer. Such is the majesty of the law.

What sort of reform would be practical? I am not a lawyer; I don't know. The present extraordinary protection afforded the defendant in court is hardly conducive to a tolerant attitude on the part of the police. A clever lawyer can slip the dumbest criminal through most of the legal loops — for one thing, because the defendant cannot be made to testify. It is largely for this single reason that suspects, instead of being brought directly before a Magistrate, often spend 24 hours in transit between headquarters and the District Attorney's office. Would it not be wise to amend the law and oblige the defendant to testify?

At any rate, the National Crime Commission is about to take up the whole matter within the near future, and once it is dragged out into the open the day of its interment should be hastened.

How the English Middle-Class Lives

Condensed from Harper's Magazine (April, '29)

Geoffrey Layman

WE members of the English middle-class are accustomed to think that the economic changes produced by the War have hit us pretty badly. And so indeed they have. Income tax stands at four shillings in the pound, and though, what with various allowances we actually pay only about two shillings sixpence in the pound, even this makes a heavy first charge on our incomes. Statistics tell us that the increased cost of living is no more than 63 percent; but we know that for us it is at least 100 percent.

I am overdrawn at the bank at the end of every month (my father would have considered himself disgraced by that); I haven't saved a penny (but then I can look forward to a pension, and my life is fairly well insured); and we wonder how on earth we are ever going to find money for the children's education — all as a result, as we mournfully tell ourselves — of this accursed war. But I'm beginning to wonder whether, after all, we are really so badly off as we think.

I am 42 and have been married 14 years. We have three children, aged twelve, eight, and four. I occupy a responsible position in the Civil Service, and draw a salary of 1400 pounds per annum. This branch of the Civil Service is entered through one of the stiffest competitive examinations in the world, and presents many attractions to the young man who has done well at Oxford or Cambridge; once entered, a man is irremovable except for gross misconduct, and can look forward to a career in dignified surroundings, amid colleagues who possess considerable intellectual ability. In short, the higher division of the Civil Service is one of the inner fortresses of the English middle-class, and displays in an eminent degree nearly all the qualities and defects of that class — on the one hand its scrupulous integrity, its innate capacity for the business of government, and its devotion to its job just because it is its job; and on the other, its smug sense of superiority, its hard-baked conservatism, its somewhat limited sense of humor, and its almost complete lack of initiative and drive.

A man does not expect to change his job in England any more than he expects to change his wife, nor does he willingly

move from one house — still less from one town — to another. He hopes to send his son to the same college at the same university as he went to himself, and he confides his legal business to the son of his father's solicitor. We are, in fact, a very conservative tribe.

It works out that, after paying our income tax and rent, we have £100 for expenses. Our rent is one of our bits of luck. We have a pleasant house in a very pleasant quarter of London. Cynthia found it before the war, and the rent was £60 a year, which was pretty cheap even then; and just as our agreement was expiring, Parliament in a mood of benevolent wisdom passed the Rent Restriction Act, which enabled our landlord to raise the rent to £80 but prevented him either from turning us out or from raising it any more.

For our £80 a year we have two very decent sitting rooms and a "study"; a good bedroom for ourselves, with a dressing room and a bathroom, a big nursery and the maid's bedroom (for cook and maid); and in the basement a kitchen and scullery, and a good sitting room for the maids, and behind a bit of garden. It *is* a bit of a squash. The two boys have to sleep in my dressing room, and the nursemaid in the nursery. Another drawback is the single bathroom, which means that neither of us can ever have a bath before dinner, because the bathroom is occupied by a succession of grubby children en route to bed. But we love this poky little house.

Cynthia and I have always had a single bank account and she has much of the management of our financial affairs. It is understood between us that she will not draw more than £50 a month, and that I shall not draw more than £15 a month, leaving a balance of about £35 for "the bills." Out of her £45 she pays for all food and drink, laundry, the servants wages (£9 a month among the three of them, with occasional additions for a charwoman and a sewing maid), and for all her clothes and the children's. For her own clothes she has in addition the allowance of £40 a year which her father gives her.

My £15 is intended to meet such fixed expenses as fares, sixpence a day; lunch, one shilling sixpence a day, and all the other small variable expenses of a man in my position.

The rest is for "the bills"; and with these we always seem to be panting at least a month behind. Chief among them, marking the four financial crises of the year, are the terminal school bills, and my birthday, when most of my life insurance premiums, amounting to about £60, fall due. Like great breakers when

one is bathing, they approach, one is overwhelmed, and at last emerges, gasping and relieved. There are other bills: gas, light, telephone, coal, wine, my tailor, dentist, doctor, and so on. But let me speak separately of the doctor, as he deserves.

I have read with interest of the battle of specialist versus general practitioner in the United States. In England the general practitioner, God bless him, still holds his own. Our doctor's first bill was for bringing our daughter into the world. It included all preliminary visits (and there were a good many), and all attendances for a month or so after the confinement, and it amounted to £15. His present half-yearly bills are usually anything from £3 to £8.

Of course we are definitely better off than our brothers and sisters in the States as to servants; for we can not only obtain, but also afford, good servants. Closely connected with this blessing of good service is that of privacy, which you can only really get in a big city where it is not an obligation to know one's neighbors. We never have to ask any one we don't like to dinner, and perhaps once a week we go out to dinner with people we like. More than half the evenings of our life we sit after dinner in the drawing-room, Cynthia with her work and perhaps a game of patience, I with a book or sometimes scribbling something, with an occasional gramophone evening when we feel like it, until my whiskey comes in at 10:15 and, after the last pipe, we go to bed about 11 o'clock. It sounds devastatingly dull; but it isn't — or at any rate we don't find it so.

When I began this article I intended to show how the English middle-class had been harried and crushed by the taxation in this post-war world. But somehow, although the tax-gatherer is always with us and the education of the children is a lowering cloud over the future, nevertheless we live an extraordinarily contented life.

How far this is true of our class as a whole it is difficult to know. I think the middle-class lives differently from its fathers, but not necessarily less happily. We marry on comparatively smaller incomes, we spend comparatively more on pleasures, we no longer regard thrift as a cardinal virtue, we have a higher standard of living.

I do not suggest that the economic condition of England is healthy at this moment; it is not, though I believe it will be. But if we compare the life of the individual in any class of life except that of the "landed gentry" with what it was before the war, it is unquestionably fuller and richer, if not more happy and contented, now than then.

One Store after Another

Condensed from Collier's, The National Weekly (March 30, '29)

John T. Flynn

THE process of manufacturing an egg is very simple — at least to the hen. But after she has done her share it takes an army of hucksters, assemblers, shippers, candlers, jobbers, wholesalers, retailers, horses and wagons, trains and motor cars to get that egg to the housewife. That is called distribution.

What is true of the egg is true of most of the necessities of life. Our manufacturers have become almost as efficient as that master-craftsman, the chicken. But the business of distribution has hung back under the dominion of cumbersome and expensive methods. Now, however, we are witnessing the beginning of the first great practical effort to deal with that problem.

Away back in that troubled year when John Brown made his mad attempt at Harper's Ferry, a painter set to work one day on the front of a small store in Vesey Street in New York to give it a new coat of red paint. Things weren't so good in the hide and leather business. And a man named George Gilman was trying his hand at something new.

In those days tea and coffee sold at the outrageous price of a dollar a pound. Gilman heard of a cargo of tea that was going in search of a buyer. So he bought it, stocked up on coffee and spices, rented the old Vesey Street store and put a young chap from Boston named George Huntington Hartford in charge of it. Gilman wasn't thinking about chain stores, or even about cheaper retailing. He just wanted to sell that cargo of tea. His only contribution to the chain-store idea was the red front on the store, and the selection of young Hartford for his manager. For from that small germ, Hartford, who very soon took over the store, built up that extraordinary chain of 17,000 stores which encircles the United States today and is known as the Great Atlantic & Pacific Tea Company. In adopting that name Hartford merely capitalized the current popularity which our two great oceans had received through the opening of the Union Pacific Railroad joining the Atlantic and Pacific oceans.

One of Hartford's first merchandising schemes was the giving of premiums. He induced ladies to form clubs of ten and pool the premium coupons given

with purchases. Ten ladies quickly accumulated enough coupons to get a full set of china free. The ten drew to see which one would get the set. But after she got it, it is plain that she was bound to go on buying tea in order to give the other nine a chance.

The next important step in the development of the chain store was taken in Utica, N. Y. In 1879, a big, shy youth, fresh from a New York farm, who had been playing storekeeper since his childhood, got a job in a small general store in Watertown. Though he turned out to be a great sales engineer, he was too diffident and ill-at-ease to be much of a salesman personally. So he had to work 15 hours a day for his first three months at the munificent salary of nothing a week. In those good old days employers considered it quite a cute bit of strategy to get unsophisticated young people to work for them for nothing under the guise of affording them experience. So young Frank Woolworth took his pay out in those first three months in education. But he got lots of that.

The story of how he discovered the power of the nickel is well known. A mass of miscellaneous articles all about the store had been gathering dust unsold for a long time. Woolworth asked to be permitted to get rid of them in his own way. He assembled them on a table and hoisted over them this magic legend: "Everything on This Table Five Cents." The bargain hunters swept the table clear in a day. There was an idea.

Woolworth got his father to endorse his note, borrowed some money and opened the first five-cent store on a side street. It failed rapidly. Woolworth sold half the stock for what he could get and shipped the other half to Lancaster, Pa. He knew that thrifty Quakers "knew the value of a nickel." At his new store Quaker housewives came in droves. Having proved the value of the nickel as a mercantile factor he decided to admit the dime to partnership. The Five and Ten was born.

It didn't take Woolworth long to make up his mind that if a five-and-ten-cent store was good, two of them were twice as good. And so he tried to start others. But they all failed. He was learning what George J. Whelan of the United Cigar Company was to learn later — the mystery of the location. Woolworth began to find out things about it and in a short time he, like Hartford of the A. & P., had a number of stores in different cities.

Several new characters now began to appear on the stage. There was an energetic Irish hotel man, James Butler, who in 1884 bought out a little chain and

made it grow. Then, out in Kemmerer, Wyo., a young man who had begun as a clerk at $2.70 a week bought a third interest in a rude, boarded structure at a remote crossroads and lived there in narrow quarters with his wife and baby. His name was J. C. Penney — a name which today is blazoned across 1000 department stores. In Syracuse a chap named Whelan was making a success of the wholesale tobacco business. Everyone remembers the old-fashioned "tobacconist shop" — the walls decorated with pictures of burlesque queens and prize fighters, some copies of the Police Gazette on the counter, and a row of chairs against the wall with a cuspidor or two. Whelan's cigar store was spick and span, well-stocked and furnished, with no chairs or literature. Instead there was a sign reading: "No loafers. All space needed for business." By 1900 he had organized the United Cigar Company.

Then there was L. K. Liggett, who noted the great advantage which the chain stores were getting in their huge buying power, and who organized a group of independent proprietors to get the same advantage by pooling their orders. Today the great concern which he started — the United Drug Company — supplies 10,000 Rexall druggists in this country and sells the American people practically one fourth of its drugs.

In the country as a whole there are now about 430,000 grocery stores. Only 70,000 of them are chain stores, but these 70,000 do half as much business as the remaining 360,000 independents combined. Chain stores have appeared in most, if not all lines — chain hotels, chain theaters, chain shirt stores and hat stores, chain barber-shops, chain bootblacks. Out in distant sections are groups of stores where you can buy goods at prices which the department stores can hardly match because they haven't got the buying power of these little stores.

A look into the future seems to show more and more chains and more links to those chains. Already the independents have been forced to adopt certain chain methods. The prosperous mail-order houses are now focusing on the erection of great chain systems of their own.

The chains now face their greatest battle — the battle among themselves. It is inevitable that, having pretty well gotten the best of all other competitors, they now begin to compete with each other. Do we face a period in which slowly but inevitably the chains will tend toward regrouping into a few giant combinations? In the grocery business that period has already apparently set in.

Medical Magic Preferred

Condensed from The Atlantic Monthly (April, '29)

Agnes Repplier

THE layman's point of view toward physicians, as it has come down to us through the centuries, is one of mockery and derision. The French adage, "Never waken a sleeping doctor," is a little like "Never warm a frozen viper." The old Italian epitaph, "I was well: I wished to be better: I took medicine and died," turns up in divers tongues and in divers ages. Pausanias is said to have attributed his length of years to the avoidance of all drugs.

Richard Burton was a layman far ahead of his generation in sense and rational skepticism. Yet intelligence and monstrous erudition alike failed to eradicate from his heart a dim respect for ancient cures that had nothing but length of years to recommend them: "In the belly of a swallow there is a stone called chelidonius, which, if it be lapped in a fair cloth and tied to the right arm, will heal lunatics, and make madmen amiable and merry." He also mentions, though he puts no faith in the cure, "a spider, lapped in silk in a nutshell, applied for ague."

Our world is a changing world, and the only durable thing in it is human nature. No longer do we put our faith in spiders or in the stone in the swallow's belly. The diseases of the present have little in common with the diseases of the past save that we die of them. Impenetrable Latin names have replaced the dramatic words which told a terror-stricken people in what guise death was knocking at their door. The "Plague" was bad enough; but think how the "Black Death" must have numbed the heart with fright. When this dreadful pestilence swept the land in 14th-century England one man out of every three died. The *Feu Ardent* differed principally in name. We are told that the hands and feet of the infected turned "black as coals," and rotted away. Then there was a malady called, Heaven knows why, the "Purples." Even the "Sweating Sickness" has an appalling sound, and the Papal Nuncio, Chiericate, writing in 1520, says that it was so swift that men riding through the streets reeled and fell dead from their horses.

Of what avail was physic against such tides of death? The world, ignorant and impotent, clung to words it could under-

stand and feel, to remedies of childish simplicity, to the hope and consolation of prayer. Centuries passed, bringing rich gifts of knowledge. We seemed immeasurably remote from the helpless throngs to whom sanitation was unknown, and who stared wild-eyed at the dying and the dead. Then in our own day a pestilence, urbanely called Influenza, carried off (so say the latest statistics) twenty million people, outstripping all recorded epidemics because of the denser population of the civilized world, and because it traveled faster and farther than any of its predecessors. When men died of the Great Plague in London, Frenchmen walked the streets of Paris in comparative security. The Influenza leaped a sea as easily as it leaped a street. Britain and the Balkans, Russia and Rhode Island, were neighbors in misfortune.

The changelessness of human nature, which progressive minds deny, is illustrated by man's age-old inclination to escape from the orderly development, the "mapped islands and charted waters" of science to byways, and short cuts, and the primrose paths of charlatanism. In the terrible months of the Plague Londoners were impelled to buy "antipestilential pills," and mysterious remedies concocted by "ancient gentlewomen," familiar with the disease from childhood. Ambroise Paré fought a hard and, I fancy, a losing fight against the preposterous drugs of his day, the ever-popular mummy scrapings, and unicorn horns — a sovereign antidote to poison.

The most amazing tale which the credulity of the world has ever furnished is the history of touching for the king's evil. From the days of Edward the Confessor in England and of Clovis in France, clear down to the days of profound skepticism and dawning revolution, men clung to the belief that scrofula was healed by the royal touch. It was claimed that this mysterious power lay in the hands of monarchs because they had been anointed with the sacred chrism. Popularity, piety, profligacy, in no way affected the healing power.

William Clowes, whose office it was to examine applicants for touching in the reign of Charles the First, was a firm believer in the monarch's prerogative. He denounced and brought to justice an impostor who claimed to be a seventh son and to heal by touch. This man, a gardener by trade, had his followers — what impostor has not! — and the evidence showed he had "enticed lords and ladies to buy the sheets he had slept in" — as unpleasant a remedy as the annals of healing record.

Henry the Fourth of France complained that, when ill himself,

he was compelled to touch 250 sick on Easter Day. He should have been ashamed of his slackness. On the Easter of 1686 Louis the Fourteenth touched 1600 people. Pepys says that in the first four years of Charles the Second's reign he touched 24,000 people, and some estimate that this monarch touched 200,000 before he died. Whatever he may have thought, he always played his part with becoming gravity, though it disconcerted him to find himself touching when he had not meant to. John Aubrey tells us that "a Mr. Avise Evans had a fungus nose, and said it was revealed to him that the king's hand would cure him. So at the first coming of King Charles into St. James's Park, he kissed the royal hand, and rubbed his nose with it. Which did disturb the king, but cured him."

Of course it cured him! That is the certain end of the story. We read over and over again that some hundreds of thousands of people were touched for the king's evil, and "all were cured." These repeated assurances of success are like the assurances of our friends today that they have been cured by patent medicines, by bottled waters, by colored lights, by deep-sea massage, by diets as alien as King Nebuchadnezzar's, by the satisfaction of subconscious desires, by being confidently told that they were well.

The age of credulity is every age the world has ever known. Men have always turned from the ascertained, which is limited and discouraging, to the dubious, which is unlimited and full of hope. The delusions of the past seem fond and foolish. The delusions of the present seem subtle and sane. When Coué unbottled his sunshine to warm us, we basked gratefully in its rays. Autosuggestion seemed a private path to Paradise. "I am not a healer. You heal yourselves," said this delightful practitioner. But when we had repeated the rosary of faith, hope, and confidence until we were lapped in content, there would come now and then like a cold wind from the north the remembrance of words we hoped we had forgotten: "Things are as they are, and the consequences of them will be what they will be. Why should we seek to deceive ourselves?" And, shivering, we awoke to realities.

A medical society in Chicago recently sent a questionnaire to several hundred laymen, asking if they preferred, and why they preferred, unprofessional to professional treatment. The answers received were with one exception — the high cost of a doctor's care — inexpressibly futile. They showed simply a peevish discontent with the possible, and a colossal faith in the impossible, which are as old as humanity.

The Gilded Sport

Condensed from The World's Work (March, '29)

Albert Payson Terhune

ONE night in 1899 I sat at the Coney Island Athletic Club, watching a tall man fight 25 smashing rounds against a short man. There was an almost awed interest in this Jeffries-Sharkey conflict because it had been heralded as the "Hundred Thousand Dollar Battle."

In those days pugilism was a sport; just emerging from the ban of the law it was still tainted with charges of rowdyism. But long before the Tunney-Heeney bout in 1928, pugilism was as much of a smugly money-making endeavor as coal mining or bond selling. There is a story in this transfiguration.

Only a few years before the Jeffries-Sharkey battle, prize fighting was sternly forbidden both here and in England. Its devotees must slip away to some woodland glade, there to watch the fight with one eye and to look out for a raid with the other. The battlers received a pitifully small meed of dollars for their long weeks of training.

The immortal Bendigo, champion of England in the 1830's, won a series of championship fights whose length and number would shame any modern boxer's record; and he had a name for saving his money. Yet in his later years he sought to support himself by turning preacher. This new profession amazed his friends, for he had been one of the foulest and most unscrupulous scrappers of his time.

Jem Mace scraped together the price of more than one cheap meal, in the early years of his ring career, by playing a fiddle on street corners. The great Tom Cribb did odd jobs as a coal heaver. Tom Johnson, for a long time the unbeaten champion of England, continued to work as a porter. Mere pugilism did not carry a living wage with it.

Theodore Roosevelt was the apostle of the strenuous life in boxing more than in any other sport. When he was governor of New York he preached it as a gloriously manly exercise and advised all boys to learn it. He went openly to any good fight he could find. His example took deep and quick effect.

In the last half of the '90's New York legalized pugilism — under the polite name of "boxing bouts" — but limited the bouts to 25 rounds and substituted gloves for bare knuckles, Marquis

of Queensberry rules to prevail. Prize fighting had taken its first hesitant steps toward the far-shining goal of Big Business.

Women in those days, of course, did not attend such brutal exhibitions; though there was a rumor that one society girl got into such a place, dressed as a man. When Mrs. Bob Fitzsimmons wanted to see her husband fight Tom Sharkey, in California, she was forced to hide in a lumber room adjoining the arena and watch through a peephole. Men, however, began to lend tone to the sport by appearing at the ringside, some of them, in dinner jackets. This was a thrilling innovation.

In my early years of following the fortunes of the ring, many a pork-and-bean fighter was willing to accept $10 as a reward for being hammered to a pulp. "Twenty years ago," says Tex O'Rourke, a man who knows, "nine out of ten fighters held down regular jobs by day and fought, when they could get a bout, at night. Now any tolerable boxer can net $50 a week. A slightly better man can draw down $100 or even $200. A husky novice named Roberti landed here from Italy a year or so ago. In a year he had paid back his boat fare and had banked $21,000."

It was the war which made pugilism safely respectable. Boxing was made compulsory in the army. The bouts between soldiers and sailors were entertainment features of that period. A big young marine, Tunney by name, got his ring start in that way.

Next, public bouts were held in New York for various war charities, under the auspices of society leaders. Women graced these battles, and the last barrier was down. Then the final phase set in.

The sports writers took up the subject from a new angle, and the press boomed it as no entertainment had been boomed before. The reading of luridly illustrated column after column on the garish theme begot myriads of new fight fans. The radio begot myriads more.

Out of the West had come the promoting genius, Tex Rickard. His was to be the ultimate magic touch. The new methods of promotion commercialized and standardized pugilism as the Rothschilds standardized banking. Here is one quaint innovation which has netted the promoters millions of dollars:

Spike and Spogg, we will say, are two well-matched fighters. In the old days they would have met, pommeled each other till one would have scored a knockout or else would have shown himself definitely superior. That would have settled the matter.

Nowadays a ten-round fight is arranged, and after it has gone

the limit, both competitors are still on their feet and fresh. Two well-trained lads wearing gloves can often box for a mere ten rounds without decisive advantage to either. Spike, we will say, receives the decision on points.

But thousands who bet on Spogg believe that he had the better of the fight. The promoters know this. The sports writers do their part, and a popular clamor is raised for a return match. Fans are breathless with fear lest Spike will not consent to meet Spogg again. (A lot Spike or Spogg has to say about it!)

Then comes a long sigh of relief from innumerable beings. The return match has been arranged. For the second time Spike and Spogg slap and buffet each other ardently for ten rounds, while the onlookers roar deliriously. Again there is grave doubt as to the winner. After careful consideration the victory is awarded to Spogg.

Obviously, now, a third and decisive fight must be arranged. This time there is more excitement than before. But what the result of this last fight may be need not interest us. The point is that the dear public has been lured into paying three times to see the same fight!

Promoters aren't to blame. If they, through the papers, can make the fans pay Monte Cristo prices to sit in the open air, a furlong from the ring, on a hot or foggy or icy night, to get occasional glimpses of two fighters who are giving a soft-glove exhibition, it is only natural that they should do it. Presently the crowd may get wise. Meanwhile the pickings are fat.

The Dempsey-Tunney fight in Chicago, in 1927, annexed gross profits of $2,600,000; of which Tunney received a flat $1,000,000 and Dempsey $500,000. The Dempsey-Tunney fight in Philadelphia in 1926 grossed $1,800,000. Dempsey got $785,000 of it; Tunney, $200,000. The first "million-dollar gate" was at the Dempsey-Carpentier battle in 1921, where Dempsey received $300,000 and Carpentier $200,000.

The old Madison Square Garden, long a prize-fight center in New York, has given way to a newer, larger, and uglier building erected at a cost of approximately $5,000,000. Similar structures are planned for Boston, Philadelphia, and Chicago.

Yet this business also is the slave of public favor. Is that favor waning? The Tunney-Heeny fight of 1928 drew a gate of only $625,000. Will this mighty business become a cast-off fad? Its fate is up to the public — and, incidentally, to the promoters.

Who Gave Us Our Modern Wonders?

Condensed from Nation's Business (March, '29)

Dr. Robert A. Millikan

THE modern world looks upon the invention of the radio and the airplane as wonderful achievements. So they are, but they are of slight importance as compared with the sweep of pure science which is knowledge of the physical world, the ethereal world, the biological world and the intellectual world.

Consider the historic background out of which the so-called modern marvels, the radio and the airplane, have sprung. Neither would have been possible without 200 years of work in pure science — work beginning in the 16th century with Copernicus, Kepler and Galileo. Their discoveries for the first time caused man to glimpse nature as ruled by law, a power which can be counted upon and which hence is worth knowing.

This discovery, which began to be made about 1600, was the supreme discovery of the ages, for before any application was ever dreamed of, it began to change the whole philosophical and religious outlook of the race. The resulting development of pure science — mathematics and celestial mechanics — was useless knowledge to the unseeing, but constituted the indispensable foundation for the terrestrial mechanics and the industrial civilization which actually followed in the 19th century.

The very existence of the law of gravity was discovered as recently as 1650. Prior to that levitation — the fabled phenomenon of maintaining heavy objects in the air without support — was just as acceptable a scientific idea as gravitation. It is within the memory of any person of 60 that the question could be seriously debated as to whether Archbishop Usher's chronology — computed by adding Adam's 930 years to Enoch's 365 years to Methuselah's 969 years, etc., gave the correct date of creation.

What has all this to do with the modern marvels of science? Everything. For mankind's fundamental beliefs about the nature of the world and his place in it are in the last analysis the moving forces behind all his activities.

Man's beliefs about the nature of his world cause him in Africa to spend his time in beating tom-toms to drive away evil spirits. They caused man in Phoenicia to build a great "burning fiery furnace" to Moloch into which to

throw his children as sacrifices to his God. They caused him to burn heretics in Flanders, and to drown witches in Salem.

Now let us turn to the fruits of correct understandings, as exemplified by the radio and the airplane. The great radio industry is only 19 years old. But research in pure science which led up to it had been carried on for 20 years before it was realized that there were immediate commercial applications of electronic discharges in high vacuums. As for the airplane, it was only made possible by the internal combustion engine. This engine grew from the use, through the hundred preceding years, of the steam engine. This last was only made possible through 200 years' work in celestial mechanics, and that work was only made possible by the discovery of the laws of force and motion by Galileo and Newton. These are illustrations of the relationship of pure science to industry.

We have learned within the past half dozen years through studies in radio activity that our world has in all probability been a going concern, in something like its present aspect, for more than a billion years. Hence it is reasoned the human race can probably count on occupying it for say another billion years.

Further it is believed that mankind has been doing business on it in something like his present shape for some 20,000 years, perhaps 50,000, but in any case a time that is small in comparison with the time ahead of him.

In other words, we have learned that mankind, speaking of him as an individual human being, is now just an infant a few months old at the most. He is an infant that up to a minute ago — for the 300 years since Galileo is but a minute in the geological time-scale — has been lying in his crib playing with his fingers, wiggling his toes, and shaking his rattle. In a word, he has spent his time in simply becoming conscious of his own sensations and his functions, waking up, as he did amazingly in Greece, to his own mental and emotional insides.

Just one minute ago he began for the first time to peer out of his crib, to wonder and to try to find out what kind of external world lies around him, what kind of world it is in which he has to live for the next billion years. The answers to that question henceforth become his supreme concern.

In this minute of experience he has bumped his head and seen stars — real ones and unreal ones — and he hasn't yet learned to distinguish with certainty between those that actually exist and those that only seem to because his eyeballs have received a blow. Consequently he is reaching

out his hands part of the time to try to grasp illusions, and yet slowly, painfully learning, bit by bit, that there is an external world that can be counted upon, when it has once become known, to act consistently, not capriciously.

He is learning that there is a law of gravity and that it isn't necessary to be covered with bruises because he forgets it.

He is learning that there is a principle of conservation of energy, and that all constructive and worth-while effort everywhere must take it into account and be consonant with it.

He is learning that there are facts of heredity that it is futile to inveigh against, that our whole duty is rather to bend every energy to know what these facts are and then to find how to live in conformity with them.

In a single sentence, he is learning that there is the possibility ahead of mankind learning in the next billion years to live at least a million times more wisely than we now live.

We need more science in our education in order to let everyone see that it is not always true that "one opinion is as good as another." We need it to let everyone understand that up to Galileo's time it was reputable science to talk about gravity and levity, but that after Galileo's time the use of levity became limited to the ridiculous, that "the town that voted the earth was flat, flat as my hat, flatter than that," had a perfect right to exist before 1400 A. D., but not after that.

Fear of knowledge is as old as the Garden of Eden and as recent as Dr. Faust, and there is no new answer to be made to it. The old answer is merely to point to what the increase of knowledge has done to the lot of mankind in the past. I think that answer is sufficient, for it has certainly enfranchised the slave, given every man, even the poorest, such opportunities as not even the prince of old enjoyed.

Who would go back to the Stone Age because man then had no explosives? Of course every new capacity for beauty and joy brings with it the possibility of misuse and hence a new capacity for sorrow.

But it is our knowledge alone that makes us men instead of lizards, and we cannot go back whether we would or no. Our supreme task is to create greater beauty and fuller joy with every increased power rather than to turn our weeping eyes toward the past and fling ourselves madly, unreasoningly athwart the path of progress.

The Two Leaves

Excerpts from Bambi (Simon and Schuster)

Felix Salten

Bambi, one of the best selling books of the season, is an exquisite idyll of animal life. It is a rarely beautiful story about a deer, and about the woods and the meadows and the skies and the brooks and the forests; about nature, therefore, but nothing wearisome, or boresome, or dull, or draggy about it.

THE leaves were falling from the great oak at the meadow's edge. They were falling from all the trees.

One branch of the oak reached high above the others and stretched far out over the meadow. Two leaves clung to its very tip.

"It isn't the way it used to be," said one leaf to the other.

"No," the other leaf answered. "So many of us have fallen off to-night we're almost the only ones left on our branch."

"You never know who's going to go next," said the first leaf. "Even when it was warm and the sun shone, a storm or a cloudburst would come sometimes, and many leaves were torn off, though they were still young. You never know who's going to go next."

"The sun seldom shines now," sighed the second leaf, "and when it does it gives no warmth. We must have warmth again."

"Can it be true," said the first leaf, "can it really be true, that others come to take our places when we're gone and after them still others, and more and more?"

"It is really true," whispered the second leaf. "We can't even begin to imagine it, it's beyond our powers."

"It makes me very sad," added the first leaf.

They were silent a while. Then the first leaf said quietly to herself, "Why must we fall? . . .

The second leaf asked, "What happens to us when we have fallen?"

"We sink down . . ."

"What is under us?"

The first leaf answered, "I don't know, some say one thing, some another, but nobody knows."

The second leaf asked, "Do we feel anything, do we know anything about ourselves when we're down there?"

The first leaf answered, "Who knows? Not one of all those down there has ever come back to tell us about it."

They were silent again. Then the first leaf said tenderly to the other, "Don't worry so much

about it, you're trembling."

"That's nothing," the second leaf answered, "I tremble at the least thing now. I don't feel so sure of my hold as I used to."

"Let's not talk any more about such things," said the first leaf.

The other replied, "No, we'll let be. But — what else shall we talk about?" She was silent, but went on after a little while, "Which of us will go first?"

"There's still plenty of time to worry about that," the other leaf assured her. "Let's remember how beautiful it was, how wonderful, when the sun came out and shone so warmly that we thought we'd burst with life. Do you remember? And the morning dew, and the mild and splendid nights . . ."

"Now the nights are dreadful," the second leaf complained, "and there is no end to them."

"We shouldn't complain," said the first leaf gently. "We've outlived many, many other."

"Have I changed much?" asked the second leaf shyly but determinedly.

"Not in the least," the first leaf assured her. "You only think so because I've got to be so yellow and ugly. But it's different in your case."

"You're fooling me," the second leaf said.

"No, really," the first leaf exclaimed eagerly, "believe me, you're as lovely as the day you were born. Here and there may be a little yellow spot but it's hardly noticeable and only makes you handsomer, believe me."

"Thanks," whispered the second leaf, quite touched. "I don't believe you, not altogether, but I thank you because you're so kind, you've always been kind to me. I'm just beginning to understand how kind you are."

"Hush," said the other leaf, and kept silent herself for she was too troubled to talk any more.

Then they were both silent. Hours passed.

A moist wind blew, cold and hostile, through the tree-tops.

"Ah, now," said the second leaf, "I . . ." Then her voice broke off. She was torn from her place and spun down.

Winter had come.

Ponderables

Is the hope of immortality vain? One might answer somewhat as follows:

Imagine twin babies, unborn in their mother's womb, gifted with the power of thought, the one a skeptic and the other a believer. They are living without light and without breathing, both of which would be to them unthinkable. The crisis of birth, tearing them loose from the matrix on which their existence seems fundamentally to depend, would appear to them like death. As for picturing the world without, that would be impossible.

The skeptic babe could say to the believer, "You are only a wishful thinker; you desire to go on living and so you think you will. How can you be decently scientific and think that? You see how absolutely our existence depends on present circumstances. You are credulous to suppose that the disruption of them will still leave us alive."

To which the believing babe could reply, "My faith is not mere wishful thinking. Month after month nature has been at work here developing something so marvelous that I am confident of an aftermath. Nature is not utterly irrational. She means something by all these preparations, and something will come of them."

To which the skeptic might retort, "If you are so sure about the future, describe it! What is it like?"

"I do not know how to picture it," the believing babe would have to say. "It is to me unimaginable, but it may still be true. I am agnostic about all details. Only of this I feel confident, that nature is not so senseless as to undertake such a promising process with no end in view. The crisis that you call death will turn out really to be birth." — *Harry Emerson Fosdick* in *Harper's Magazine.*

Most lives — even the lives of great men — remind us chiefly that there are huge and recurrent lapses in their actual achievement, and extensive lacunas in their positive living. Take for example the life of Nathaniel Hawthorne. Even his biographer cannot tell us what he was doing for ten years after leaving college. What occupied Tennyson between 1832 and 1840? Woodrow Wilson between 1885 and 1900? It would be just as absurd to say that they were doing nothing, as to contend that they were preparing themselves for the work that lay ahead of them. Actually, no man knows that he is destined for immortality or high office; he only knows that he is living from year

to year, storing up accumulated energies and experience, waiting and hoping that his chance will come. And after ten years have slipped by in this fashion, an embarrassing gap is observed by biographers who see the great man's life in convenient perspective.

"Am I getting anywhere?", and "Why doesn't something happen to me?" are questions that Hawthorne and Woodrow Wilson were putting themselves at the age of 35, Zola at 30, Napoleon at 20, and perhaps the present Reader, and the Writer at all ages. For this last unhappy pair, consolation lies in the spectacle of many an immortal who passed through a decade or a quarter century without apparent achievement or progress. Something is going on, of course, but it's a something that doesn't show in actions, speeches, bank balances or published volumes. There is a slack in the time and tide of our affairs, while life idles along at half-speed. — *Table Talk* in the *Century Magazine*.

The New York traffic cop is an autocrat. He likes to disregard the red and green signals to show you, as Don Marquis says, "who is king." The supreme sin of the motorist, in his eyes, is *lèse-majesté*. And he is often quite violent about it.

The London bobby is an opportunist. His only concern is clearing the traffic. He winks at violations of the rules if they are intelligent and successful. He is less assertive, and yet obeyed more implicitly, than his New York counterpart. But he is dealing with a more law-abiding populace.

The Paris *gendarme* is not concerned with the motor traffic at all. His care is the pedestrian. At regular intervals he cleaves a swath through the moving stream of vehicles, like Moses dividing the Red Sea, and the swarms of *piétons* cross over. Then he waves his white baton and the cars resume their struggle for gangway without interference from him. And yet it is easier to go about in a car in Paris than in London or New York. In the country there is no speed limit, but drivers are held strictly accountable — a more intelligent regulation than our own. — *Earnest Elmo Calkins* in the *Atlantic Monthly*.

So They Say

Excerpts from The Golden Book

HENRY FORD: "Thinking is the hardest work there is, which is the probable reason why so few engage in it."

RUSSELL CROUSE, *column editor, New York "Evening Post":* "Home cooking in New York would be speeded up 50 years by the use of zippers on canned goods."

WALTER D. DIACK, *General Secretary, New York City Y. M. C. A.:* "Seven o'clock in the morning is the ideal time for a youth to make that most important decision he has to make — namely, to what girl shall he propose marriage?"

C. E. A. WINSLOW, *professor in Yale Medical School:* "We are coming to recognize that the high-grade moron is perhaps a necessary and desirable element in a civilization that involves the performance of many routine tasks repulsive to the mentally alert."

DR. HARRISON E. HOWE, *editor, says science has injured the farmer:* "It costs as much to take a box of oranges from Jersey City across the river to New York retailers as it does to pick the crop in California, sort it, and ship it across the country."

VISCOUNT LASCELLES, *husband of Princess Mary of England:* "Photographers have a tiresome habit of clicking their cameras just at the moment when my mouth is wide open, or when I am in some unattractive or undignified pose. That kind of a photographer is a damned nuisance."

DRIVER W. BARNES, *English locomotive engineer:* "Running my train on a long journey to Harrowgate is just like a verse of poetry to me."

DR. KARL VON LEWINSKI, *German Consul General in New York:* "Nations themselves have never desired war. The statesmen at the heads of governments have always been responsible for bringing about bloody conflicts."

NEW YORK "TIMES": "Of course, if traffic keeps on getting heavier they might have one-way cities."

JOHN GUNTHER, *the New York "Sun's" special correspondent in Moscow:* "Seven of the nine men who run Russia never went to school."

OLD LADY, *when asked by the Scotch minister if she liked his address:* "I didna like it much, and for three reasons. Ye read it! Ye did no' read it well!! And, it was na' worth reading!!!"

SIR HARRY LAUDER, *Scotch comedian:* "You cannot learn to be a comic; it is a gift from God."

RAMSAY MACDONALD, *British statesman:* "For God's sake, believe in something — even if it is only in the existence of the Devil."

MRS. CARRIE CHAPMAN CATT, *suffragette, tells 1500 women at meeting that lipstick still enslaves their sex:* "You are still the great exploited sex, as you will realize if you study the advertisements which are wholly based on appeals to your vanity."

EDWIN C. HILL, *newspaper writer, visiting the National Automobile Show, decides that even here Woman has become boss:* "For Her they have made America's greatest motor car show as thrilling as a Tiffany showcase. For Her they have created motor cars with the lovely lines of racing yachts. For Her they have filled a vast building with the gorgeous and irresistible colors of an English garden in spring. It is all Hers."

A JAPANESE COLONEL, *when asked why no medals for valor are given to Japanese soldiers:* "Bravery is not an exceptional virtue."

ELSIE JANIS, *actress:* "Personally, I'm going to keep on falling in love just as long as I can find someone to rehearse with me."

LORD DEWAR, *English wit:* "Love is an ocean of emotion, entirely surrounded by expenses."

REV. A. CLAYTON POWELL, *pastor of the Abyssinian Baptist Church:* "American negroes have wasted enough money in show-off funerals in the last 30 years to build and stock a huge department store in every city in the United States where there are 50,000 members of the race."

JOHN BAYNES, *a negro, explains to the judge his possession of a pint of whiskey:* "I soak mothballs in it and use it for my rheumatism."

E. S. LAFRANCE, *president of the National Pickle Packers' Association, records one of the far-reaching effects of fashion on industry:* "Yes, the ladies have taken up the slack in the pickle market. They eat 'em plain, fancy, warted and otherwise — to keep thin."

THE OFFICE BOY, *advising on bootleg liquor:* "Lean off it. It makes ya act the way ya ain't."

PROFESSOR SALVADOR DE MADARIAGA, *Spanish humanist:* "Love has its roots in sex, but its foliage and flowers are in the pure light of spirit."

THE PRINCE OF WALES: "I have found all the world over that if two men, whatever may be their nationality, get together and talk 'horse,' any ice, any frigidity, that may have existed between them is very quickly disposed of."

HARRY EMERSON FOSDICK, *preacher:* "Hating people is like burning down your own house to get rid of a rat."

The following announcements, reprinted from publishers' advance notices, serve as a guide to "quality-group" magazines which have made their appearance on the news-stands since this issue of the Digest went to press.

This feature has been incorporated in compliance with requests from subscribers, who have felt that it should prove helpful to those who try not to overlook articles on particular subjects of individual appeal.

The editors of the Digest will welcome expressions from readers generally as to the value of this service.

ATLANTIC MONTHLY

The Black Legend, by Ivy Lee.
Fair or unfair, right or wrong, the reputation of our country abroad is at a low ebb. Mr. Lee's notable analysis will make its impression.

The Magistrate's Indian Diary, by Sir John Campbell.
The first paper in a series giving an exceedingly interesting picture of India as it actually is.

The Sheep Herder Calls It a Day, by Archer B. Gilfillan.
Another delightful paper by the practical philosopher who prefers sheep to cows and cows to men.

The Danger of Perpetual Endowments, by Julius Rosenwald.
Mr. Rosenwald's public gifts are as intelligent as they are generous. His discourse on the principles of giving is of national importance.

Valley Folks, by Eleanor Risley.
A charming chapter in the log of the pushcart Sisyphus.

CENTURY MAGAZINE

The Inequality of Man, by J. B. S. Haldane.
Its recognition should lead to greater equality of opportunity.

Middle West Is Middle West, by Lewis F. Carr.
The inland empire has a star of its own.

Psychotherapy, by William Brown.
An important contribution to medical science.

Idealism in Legislation, by Annie Osborn.
Placing on the statute-books the Sermon on the Mount.

Have You a Detective in Your Home? by John Farrar.
Today's craze for crime in fiction, and its causes.

Why Hate the Jew? by Silas Bent.
The threat against our experiment in organized self-control.

England and the Russian Revolution, by Sir Charles Trevelyan.
The present attitude of the ruling class.

THE FORUM

Can Prohibition Succeed? by Irving Fisher, Fabian Franklin, and others.
A Socratic dialogue.

Quacks, by A. A. Roback.
The popular interest in psychology has proved a gold mine for quacks, many of whom have deserted the patent medicine field for the more lucrative magic of turning gullible persons into "forceful" personalities.

The New Morality, by Will Durant.
Dr. Durant outlines his own philosophy.

Should Radicalism Be Suppressed? by Arthur Garfield Hays and Archibald Ewing Stevenson.
Two lawyers debate a citizen's right to attack his government when he believes its policies are wrong. How free can freedom be without spilling over into license and anarchy?

Twenty Ways to Make a Million, by Roger W. Babson.
The prophet of business discusses 20 new inventions for which the world is waiting.

Are Sports Harmful to Women? by Linda Gage Roth, M.D.

Humanism as a Way of Life, by Sherlock Bronson Gass.

Quotation, by C. E. Montague.
A delightful essay on what to read for.

HARPER'S MAGAZINE

The Unsocial Christian, by Katharine Fullerton Gerould.
Carries in an unexpected direction the discussion in Harper's of the present status of Christianity.

Must Our Children Start Where We Did? by Emily Newell Blair.
The Collinses have made money. Mr. Collins insists that his son and daughter begin married life without the aid of this money — that they learn to "make their own way." Mrs. Blair thinks he is utterly wrong. Her article will be strenuously debated.

Exploring Space, by Edwin Hubble.
A brilliant astronomer tells of the extraordinary extension of the limits of the known universe that huge telescopes and new scientific methods have made possible.

Alias Walt Whitman, by Harvey O'Higgins.
A new explanation of the "good gray poet," based upon documentary evidence.

Mussolini — Emperor of the Latins? by Hiram Motherwell.

People Who Want To Be Educated, by Lola Jean Simpson.

Teeth and Health, by Louis I. Dublin and Dr. T. P. Hyatt.

Making Trout Medicine, by Brendan Lee.

NORTH AMERICAN REVIEW

Women and Birth Control, by Margaret Sanger.
A reply to the recent criticism of propaganda for family limitation, written by Marjorie Wells, mother of ten.

The Failure of the Federal Reserve, by H. Parker Willis.

I'm Teaching My Boy to Defy Me, by Lincoln Steffens.
This famous journalist recounts in charming fashion his radical experiments in child rearing.

America's Clipped Wings, by Frank A. Tichenor.
A leading aëronautical authority claims that the Army and Navy are preventing a square deal for military aviation.

Why Fight Over Hollywood? by William C. Lengel.
An American author and editor accuses the English press of stirring up anti-American feeling in Great Britain, and of thus provoking menacing war talk.

A Fortune Teller's Confessions, by Princess Karina.

Volsteadizing the Anti-Trust Laws, by J. H. Williams.

Perils of the Mexican Invasion, by S. J. Holmes.

Who Cares About Colds? by T. Swann Harding.

When Antiques Come to Judgment. An Interview with the U. S. Appraiser, F. J. H. Kracke.

SCRIBNER'S MAGAZINE

Mad Anthony Wayne, by Thomas Boyd.
A vivid tale of a dashing leader, told

The Reader's Digest

It fits the hand; it suits the mind —
Never too heavy; never too light.

Always it has something wise or witty
for you, whoever you are; —
for your mood, whatever it is.

The whole magazine field has yielded
its crop to the harvesting —

Do your share of the reaping.

USE THE COUPON ON THE OTHER SIDE

with such skill that you feel the excitement as though you were on the scene.

An African Savage's Own Story, by Ibn LoBagola.
A wild and savage account of primitive customs — the barbaric preparations for marriage, the dignity and ferocity of savage justice, and the mysterious "Circle."

The Southern Legend, by Howard Mumford Jones.
An amusing review of certain Northern notions about the contemporary South.

Intelligence Tests for Apes and Men, by Edgar James Swift.
Bright children of three approach problems in the same way as do apes. Dr. Swift discusses the results of recent tests which show the extent of the gap between apes and man.

Nine Weeks of Omniscience, by Kenneth Carl Walz.
To conduct a group of strange women to Europe and acquaint them with English literature in three lectures was the burden assumed by this young Cornell instructor.

WORLD'S WORK

In Coldest Africa, by Carveth Wells.
The man who wrote "Six Years in the Malay Jungle" begins an exciting serial of his last big-game-hunting expedition through frigid equatorial Africa, up into the strange Mountains of the Moon. Glaciers on the equator! Natives wearing fur coats! His gripping story is a unique combination of adventure, scientific observation and delightful humor.

Diesel Cruiser Upsets Naval Policies, by Roswell H. Ward.
The first authoritative account of the new German Diesel cruiser, "Ersatz Prussen." She is faster than any capital ship in any navy, and with her 11-inch guns she can outhit any cruiser planned under the new naval agreements.

10,000 Actors Jobless, by Earl Chapin May.
An illuminating article on the collapse of the business that supports the spoken drama in New York City.

Has Business Wrecked the American Home? by Grace N. Fletcher.

Italy's Electrification, by Henry Kittredge Norton.

Beginning a New Volume—Subscribe Now!

READER'S DIGEST ASSOCIATION, INC.
Pleasantville, N. Y.

Please enter this subscription to The Reader's Digest for ..... year(s), beginning with the .....issue. I enclose remittance of $.....

TWO YEARS, $5.00 ONE YEAR, $3.00

SEND TO:

Name.....

Address.....

City and State.....

SEND GIFT ANNOUNCEMENT FROM

.....

DR. WILL DURANT (p. 7) became famous with the publication of his book "The Story of Philosophy." This spring, the anniversary of its publication, there will be published a companion volume, "Mansions of Philosophy," in which he tells not the philosophy of others but his own. Although he is thoroughly steeped in the writings of the most pessimistic philosophers, Dr. Durant is proud of the fact that he is an optimist and a meliorist.

MARY DAY WINN (p. 9) graduated from one of the leading women's colleges, became a teacher, grew bored with it and turned to writing. She uses four pen names and writes fiction, essays, poetry, economics, and all sorts of books and articles for other people to sign. She is co-author with Dr. Ira S. Wile of "Marriage in the Modern Manner" just published by the Century Company.

CHARLES D. STEWART (p. 11) who, as his article shows, is an authority on trees, is also the author of some illuminating papers on bees.

ROBERT WATSON WINSTON (p. 21) is a retired judge of the Superior Court living in North Carolina. His "Life of Andrew Johnson," published last year, established his place as a student of history. Some of his other books are: "Have Free Is Free Speech?" "Should the Color Line Go?" and "North Carolina — A Militant Mediocracy." "A Freshman Again at Sixty" is the account of his own experience reëntering college to fit himself to interpret the new South.

AVERY STRAKOSCH (p. 24) is the daughter of the famous Strakosch, once of the Metropolitan. She has done some striking work for the magazines.

MISS I. A. R. WYLIE (p. 27) is an English novelist who now spends most of her time in New York. She is also a frequent contributor to the magazines.

WILLIAM DE MILLE (p. 30) is a producer who has to his credit many of the better motion-pictures now being shown. He says he probably will never direct another silent film.

ROBERT KINGMAN, M.D. (p. 32) is a noted neuropsychiatrist, has been a director in many hospitals and an instructor in a medical school, and has written many monographs for technical and medical journals.

DR. JAMES T. SHOTWELL (p. 42) is a professor at Columbia University, New York. He is a contributor to the new Encyclopaedia Britannica, and edited "Records of Civilization, Sources and Studies" in five volumes. He is a frequent contributor to the magazines.

SCOTTY ALLEN (p. 52) is a veteran of the Klondike gold rush, and for over 40 years has worked with dogs. Three times he won the Alaskan Sweepstakes — a 450-mile race over ice and snow sometimes through blizzards with temperatures ranging to 70 degrees below zero. In 1915 he took 400 Alaskan dogs to the Vosges Mountains, organized them into a regular battalion, and carried ammunition to the French troops. He has never found it necessary to be cruel to a dog.

DOROTHY CANFIELD (p. 53) is one of America's leading novelists. Included in her books, which usually stand high up among the best sellers, are "The Bent Twig," "The Brimming Cup," and "Her Son's Wife." Also, she has written many popular short stories. In the non-fiction field her translation of Papini's "Christ," brought her wide recognition. Her latest non-fiction book is "Why Stop Learning?" In private life she is Mrs. John Redwood Fisher, of Arlington, Vermont.

ALBON L. HOLSEY (p. 58) is well known as a negro leader. He is secretary to Dr. R. R. Moton, the principal of Tuskegee Institute. In addition he is secretary to the board of trustees of Tuskegee and of the National Negro Business League, and director of the Tuskegee Press Service. He was born at Athens, Ga., and was educated there and at Atlanta University.

MADAME MARIA MONTESSORI (p. 21) is a physician, scientist, author, and world-famous educator whose ideas have influenced almost every school in Europe and America. She is author of "The Montessori Method."

G. H. ESTABROOKS (p. 67), as a Rhodes Scholar at Oxford, studied education and anthropology. His major interests, while teaching at present at Colgate University, are abnormal psychology, mental hygiene, and vocational guidance. This coming summer he will go to Russia and spend a couple of weeks in the laboratories of the great psychologist, Pavlov.

CHARLES J. V. MURPHY (p. 70) is a newspaper man who has been able to observe the practices of which he writes.

GEOFFREY LAYMAN (p. 72) is a pseudonym behind which the author hides his real identity. But the article is an authentic account of his way of living and his expenses.

DR. ROBERT A. MILLIKAN (p. 86) received the Nobel prize in physics in 1923 for measuring and measuring the ultimate electrical unit, the electron, and later added to the distinction of his work by the discovery of "cosmic rays." He is Vice Chairman of the National Research Council.

Our Eighth Birthday

Year after year, The Reader's Digest has brought

Pleasure and Satisfaction

to an increasing number of subscribers. Independent of advertising, its circulation has increased because

PEOPLE LIKE IT—
IT FILLS A NEED

Its "articles of lasting interest" give

ZEST

to one's thought and conversation

Thousands of enthusiastic subscribers act as subscription representatives in their communities, finding it both pleasurable and profitable to introduce the magazine to their friends and neighbors.

Liberal Commissions Are Paid to Representatives

RETURN THE COUPON FOR FULL PARTICULARS

READER'S DIGEST ASSOCIATION, INC.
Pleasantville, New York

Please send me information as to your special terms to subscribers who act as subscription representatives.

Name .....

Address .....

City and State .....